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TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, ~~1901~~ 1902.

No. ~~284~~ 72.

THE TELLURIDE POWER TRANSMISSION COMPANY ET AL., PLAINTIFFS IN ERROR,

vs.

THE RIO GRANDE WESTERN RAILWAY COMPANY.

IN ERROR TO THE SUPREME COURT OF THE ~~TERRITORY~~ State OF UTAH.

FILED APRIL 1, 1901.

(18,097.)

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1 In the Supreme Court of the State of Utah.

RIO GRANDE WESTERN R'Y CO., Plaintiff and Respondent,
vs.
W. W. FERGUSON ET AL., Defendants and Appellants.

Transcript on Appeal.

From fourth district court, Provo City, Utah, Hon. Warren N. Dusenberry, judge.

Brown and Henderson, attorneys for appellant-.
Bennett, Harkness, Howat, Bradley and Richards, attorneys for respondent.

(Marked:) Filed Jan. 10, 1899 Lilburn P. Palmer clerk supreme court, Utah.

2 In the District Court of the Fourth Judicial District, State of Utah, in and for the County of Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
W. W. FERGUSON, THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. Nunn, and L. Holbrook, Defendants.

Plaintiff complains of the defendants and alleges:—

That the plaintiff is a railroad corporation, organized, on or about the ninth day of July 1889, in, and under the laws of the State of Colorado and the Territory, now the State, of Utah, and that it still continues to exist as a corporation, and that its corporate name is "The Rio Grande Western Railway Company."

That by the articles and agreement of -corporation, it was organized and authorized, and still is authorized, to acquire, construct, maintain and operate various lines of railroad and telegraph in said State of Colorado and in the Territory, now State, of Utah, and among others a line from Grand Junction in Mesa county, in the State of Colorado to Ogden in Weber county, in Utah, passing through the city of Provo in the county and State of Utah, and that it has acquired and constructed, and for several years operated said last-mentioned line, and other lines of railroad in Utah.

That among other lines of railroad which the plaintiff is authorized to construct and operate in Utah, are lines on and over the routes following, to wit:—

A line from the city of Provo in Utah county to a point on the eastern bound-ry line of Utah where the same is crossed by the valley of the White river, passing into or through the counties of Uintah, Wasatch and Utah.

3 A line from a point at or near Provo in Utah county, to a point at or near the mouth of Duchesne fork of the Uintah river in Wasatch county, passing into or through the counties of Utah, Wasatch and Summit.

That said counties, into and through which said lines of route pass, are referred to as said counties were bounded at the time of the organization of the plaintiff company.

That the only feasible route for a railroad from at or near Provo City, and thense northeasterly and easterly by either of said described routes, is to go northeasterly up or in the direction of the Provo river to the mouth of Provo cañon and thense up said Provo river and cañon to the summit of the Wasatch range of mountains, a distance of thirty miles more or less from the city of Provo, and that from the mouth of Provo cañon up said cañon and said Provo river, the line of railroad on either of the routes above named must be in and up said cañon and the lines for that distance identical.

That in the year 1889, and soon after its organization the plaintiff filed with the Secretary of the Interior, at Washington D. C., a copy of its articles of incorporation and due proofs of its organization under the same.

And the plaintiff alleges that on or about the 1st day of March 1896 it commenced a survey and location of a line of railroad from a connection with its main line in the city of Provo aforesaid, to the mouth of Provo cañon and thense up said cañon and Provo river, and prosecuted said survey and location with diligence, and completed the same for a distance of forty miles from the city of Provo, and that the said survey and location, to wit, from a point about six miles from Provo City and at or near the mouth of Provo cañon, thense up the same and the Provo river northeasterly for a distance of twenty miles more or less is upon both lines of route specified in its charter as aforesaid, and partly upon unsurveyed lands of the United States.

4 That the plaintiff has made a map of said surveyed and located line, and the survey and location thereof has been adopted by the plaintiff as the definite location thereof, and the plaintiff has commenced and is prosecuting the construction of its railroad on said line.

That said line of survey and location passes over a tract of unsurveyed lands of the United States, which the plaintiff cannot accurately describe, but which when surveyed will proximately be parts of the southeast quarter of the southeast quarter of section 27, of the west half of the southwest quarter of section 26, of the northeast quarter of the southwest quarter of section 26, and of the northwest quarter of the southeast quarter of section 26, all in township 5, south of range 3 east of the Salt Lake meridian, and lying in said Provo cañon and along and near to said Provo river.

That the defendant W. W. Ferguson had or claimed, prior to plaintiff's survey, some possessory right by occupation of said land or some part thereof, and that by reason of said land being *being* unsurveyed, and the claim made by said Ferguson not being bounded or marked as to width on either side of the river, the plaintiff cannot give the width or number of acres claimed by said Ferguson, but on information and belief alleges that his claim to occupancy commences at a fence between the lands he claims to occupy, and lands below and southwesterly occupied by A. L. Murphy,

which fence is shown on Exhibit "A" hereto, and extends northeasterly up said cañon and river, a distance of about 4,800 feet more or less, and to a point which by estimation will be at or near the northeast corner of the northwest quarter of the southeast quarter of said section 26, when land shall be surveyed.

And the plaintiff alleges that its line of railroad as surveyed and located, is on and over said lands.

5 That plaintiff has appropriated for railway purposes, and for a right of way for its track and for ground for railway fixtures and appurtenances, a strip of land 200 feet wide, being one hundred feet wide on each side of the center line of the survey and proposed track of the railroad: beginning at station 643–40 of said survey on the center line and where the center line intersects the southwest boundary of the land occupied by said Ferguson on the southerly side of Provo river marked by a fence, said point being 715 feet more or less north and 200 feet more or less west from the point where it is computed the southeast corner of said section 27 will be located when said township shall be subdivided by the Government survey, thence running northeasterly up the Provo cañon and river 4,800 feet more or less to a point 1,600 feet more or less northeasterly from the confluence of the South fork of Provo river with the Provo river, the said strip of land containing 22 acres more or less.

That said strip of land, one hundred feet wide on each side of said center line of survey is necessary to the plaintiff for the construction and operation of its line of railroad.

That a map of the line of route of the railroad and the location and survey through and over the lands claimed to be occupied by said Ferguson and extended each way to show connections with plaintiff's location beyond said lands, is annexed and marked Exhibit "A" and made a part of this complaint.

And on information and belief the plaintiff alleges it is the owner of said land necessary for its use, subject only to the payment of damages occasioned to the occupant by constructing, maintaining and operating its railroad thereon.

And on information and belief the plaintiff alleges that the defendant The Telluride Power Transmission Company is or claims to be a corporation of the State of Colorado, but the plaintiff has no knowledge or information concerning its corporate character, other than that it is exercising and claiming corporate rights.

6 And on information and belief the plaintiff alleges that the defendants, The Telluride Power Transmission Company, L. L. Nunn and L. Holbrook assert and claim some interest in or to said land appropriated by the plaintiff, or in the possessory right to the same or to some easement therein.

That the defendants are the only persons and parties in possession of said land or any part thereof or claiming any right or title therein or thereto, so far as is known to the plaintiff.

And the plaintiff alleges that it cannot contract for the purchase of said tract of land required for its railroad as aforesaid. That the defendant W. W. Ferguson refuses to sell alleging that he has con-

tracted to sell to the other defendants or some of them; that the other defendants refuse to sell the same or any easement therein or possessory right thereto on the pretence that they want said land and propose to flow the same for power purposes. And on information and belief the plaintiff alleges that the claimed interest of the defendant Holbrook, if any, is held by him as trustee for the defendants, The Telluride Power Transmission Company and L. L. Nunn.

Wherefore plaintiff prays judgment: That the extent of the occupation of the defendants, if any, may be ascertained and the damages to the occupants adjudged, and that upon payment by the plaintiff of said damages a right of way one hundred feet wide on each side of the center line of the survey of plaintiff's railway, on and over the land occupied by defendants or any of them, be condemned to plaintiff's use for railroad purposes, and that the plaintiff have such other and ffurther judgment and relief as may be proper.

THURMAN AND WEDGWOOD,
BENNETT, HARKNESS, HOWAT AND
BRADLY, *Attorneys for Plaintiff.*

7 STATE OF UTAH,)
County of Salt Lake,) ss:

William F. Colton being first duly sworn deposes and says that he is the assistant secretary of the plaintiff company herein; that he has read and knows the contents of the foregoing complaint and that the same is true of his own knowledge except as to matters therein stated on information and belief and as to those matters he believes same to be true

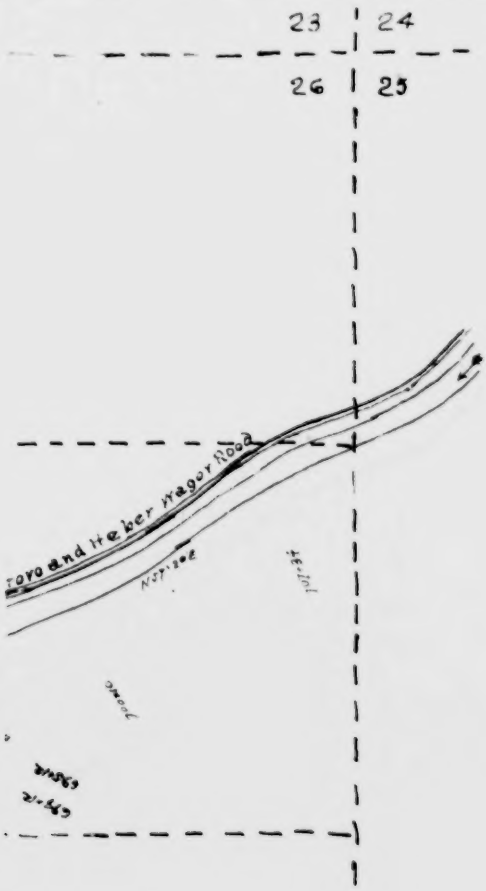
WM. F. COLTON.

Subscribed and sworn to before me this 10th day of September 1896.

[SEAL.] WM. BRADLEY,
Notary Public, Salt Lake County, Utah.

(Here follows map marked page 8.)

9 No. 123. Fourth district court, Utah county, Utah. The Rio Grande Western Railway Company, a corporation, plaintiff, *vs.* W. W. Ferguson *et al.*, defendants. Complaint. Filed Sept. 12, 1896, E. L. Jones, clerk. Thurman and Wedgwood and Bennett, Harkness, Howat and Bradley, attorneys for plaintiff.



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10 In the District Court of the Fourth Judicial District of the State of Utah, Utah County.

THE RIO GRANDE WESTERN RAILWAY COMPANY, a Corporation, Plaintiff,
vs.
W. W. FERGUSON, THE TELLURIDE POWER TRANSMISSION Company, L. L. Nunn, and L. Holbrook, Defendants. } Summons.

The State of Utah sends greeting to W. W. Ferguson, The Telluride Power Transmission Company, L. L. Nunn, and L. Holbrook, defendants:

You are hereby required to appear in an action brought against you by the above-named plaintiffs, in the district court of the fourth judicial district of the State of Utah, Utah county, and to answer the complaint filed therein, within ten days (exclusive of the day of service) after the service on you of this summons—if served within this county; or if served out of this county, but in this district, within twenty days; otherwise within forty days—or judgment by default will be taken against you, according to prayer of this complaint.

This said action is brought to obtain out of this court a judgment against the defendants herein: Condemning to the *the* use of plaintiff for a right of way for its railroad uses, all the right, title and interest of the defendants, in and to a strip of land 200 feet wide being 100 feet wide on each side of the center line which begins on the southwest boundary line of lands occupied by the defendant Ferguson at a fence, the point being 715 feet more or less north, and 200 feet more or less west, from where it is computed the southeast corner of section 27, township 5, south of range 3, east of the Salt Lake meridian will be located when said township is subdivided by Government survey, and running thence northeasterly up the Provo river and Provo cañon and following near to the course of said river, a distance of 4,800 feet more or less to a point 1,600 feet more or less northeasterly from the confluence of the South fork of the Provo river with the Provo river and containing 22 acres, more or less; that the extent of the occupation of the defendants, if any, may be ascertained and the damages to the occupants adjudged. For cause of action; plaintiff alleges; that plaintiff is a railroad corporation duly organized and existing under the laws of the State of Utah,
11 organized and authorized to construct and operate various lines of railroad and telegraph in said State of Utah, and among others a line from Grand Junction in Mesa county, State of Colorado to Ogden in Weber county, State of Utah, passing through the city of Provo in the county and State of Utah, and that it has acquired and constructed, and for several years said last-mentioned line; that among other lines of railroad which the plaintiff is authorized to construct and operate in Utah, are lines on and over from the city of Provo in Utah county to a point on the eastern boundary

line of Utah where the same — crossed by the valley of the White river, into and through the counties of Uintah, Wasatch and Utah; that the only feasible route for a railroad from at or near Provo City, and thence northeasterly and easterly is up in the direction of the Provo river in the mouth of Provo cañon and thence up said Provo river and cañon a distance of thirty miles more or less from the city of Provo, and that from the mouth of Provo cañon up said cañon and river, the line of railroad must be in and up said cañon; that in the year 1889 the plaintiff filed with the Secretary of the Interior, at Washington, D. C. a copy of its articles of incorporation and due proof of its organization under the same; that on or about March 1st, 1896 plaintiff commenced a survey and location of a line of railroad from a connection with its line in Provo City to the mouth of Provo cañon and thence up said cañon and Provo river, and prosecuted said survey and location with diligence and completed the same for a distance of forty miles from the city of Provo; that the plaintiff has made a map of said surveyed and located line and has commenced and is prosecuting *of* its railroad construction on said line; that defendant W. W. Ferguson had or claimed, prior to plaintiff's survey, some possessory right by occupation of said land or some part thereof; that plaintiff is the owner of said land necessary to its use, subject only to the payment of damages occasioned to the occupant, by constructing, maintaining and operating its railroad thereupon; that defendants The Telluride Power Transmission Co., L. L. Nunn and L. Holbrook claim some interest in or to said lands; that defendants are the only persons or parties in possession or claiming any right to said lands or any part thereof, so far as is known to plaintiff. For further particulars see plaintiff's complaint on file in my office.

And you and each of you are required to appear and show cause within the time aforesaid, why the property described should not be condemned as prayed for in complaint.

And you are hereby notified that if you fail to appear and answer the said complaint as above required, the said plaintiff will apply to the court for the relief demanded in the complaint, and cost of suit.

Witness, the Hon. A. C. Hatch, judge, and the seal of the district court of the fourth judicial district, in and for the county [SEAL.] of Utah, State of Utah, this 12th day of September, in the year of our Lord one thousand eight hundred and ninety-six.

E. L. JONES, *Clerk.*

11½ *Return of Officer.*

STATE OF UTAH, } ss:
Utah County, }

OFFICE OF THE SHERIFF OF UTAH COUNTY, UTAH.

I hereby certify that the within summons came into my possession on the 14th day of September, 1896, and that on the 14th day of September 1896, in the city of Provo, Utah county, State of Utah,

I served the same upon the within-named defendant L. Holbrook by delivering to and leaving with Mrs. Holbrook, for L. Holbrook a full, true and correct copy of the within summons, duly certified thereto together with a duly certified copy of the complaint attached thereto. She being a suitable person over the age of 14 years, and at the usual place of abode of the said L. Holbrook, and I further certify that I delivered to W. W. Ferguson, in Provo precinct, Utah county, State of Utah, a full, true and correct copy of the within summons.

Dated at Provo, Sept. 14th, 1896.

JOHN A. BROWN, *Sheriff*,
By THOMAS FOWLER, *Deputy*.

Fees, service	$2.00
Mileage	2.60
Total	$4.60

Original.

No. 123. District court, fourth judicial district, Utah county. Rio Grande Western R'y Co. a corporation, plaintiff, *vs.* W. W. Ferguson *et al.*, defendants. Thurman & Wedgwood, Bennett, Harkness, Howat & Bradley plaintiffs' attorneys. Filed on return Jan. 2nd, 1897. E. L. Jones, clerk, by R. E. Knowldere, deputy clerk.

12 *Return of Officer.*

STATE OF UTAH, }
County of Utah, } *ss:*

I, John A. Brown, sheriff of Utah county, Utah, hereby certify that I received the annexed summons on the 14th day of September 1896, and according to the command thereof I served the same upon the defendant, The Telluride Power Company by delivering a true copy thereof to L. L. Nunn at Provo City, Utah, on the 10th, day of November 1896, the said L. L. Nunn, being the general manager of said defendant company, and being in the employ of said company, and having charge of said company's property in Utah county, Utah, and said company being a foreign corporation and having no other acknowledged agent or officer in this State. And on the same day I served said summons on the defendant L. L. Nunn by delivering to him personally, at Provo City, Utah, a true copy thereof.

JOHN A. BROWN,
Sheriff of Utah County, Utah,
By THOMAS FOWLER,
Deputy Sheriff.

Fees for service $2.00.

13 In the District Court of the Fourth Judicial District in and for the County of Utah and State of Utah.

RIO GRANDE WESTERN RAIL. CO., Plaintiffs, *vs.* W. W. FERGUSON, THE TELLURIDE POWER Transmission Co., L. L. Nunn, and L. Holbrook, Defendants.	Petition for Removal of this Cause to the United States Circuit Court in and for the District of Utah.

To the honorable district court of said county and State:

Your petitioners, The Telluride Power Transmission Co., and L. L. Nunn, respectfully show that they are the defendants in the above-entitled suit, and that the matter and amount in dispute in the said suit exceeds, exclusive of interest and costs, the sum and value of $2,000.00.

Your petitioners further show that said suit is of a civil nature and that in said suit there is a controversy that is wholly between citizens of different States and which may be determined as between them, to wit:

A controversy between your petitioners, The Telluride Power Transmission Co. and L. L. Nunn, who aver that they were, at the time of the bringing in of this suit, and still are, residents and citizens of the State of Colorado, and the said plaintiff, The Rio Grande Western Railway Co., who, as your petitioners aver was then,

14 and still is, a resident and citizen of the State of Utah; that said controversy is of the following nature, viz: an action purporting to be an exercise of the right of eminent domain and to condemn a right of way over certain lands described in plaintiff's complaint, and to determine the extent of the occupation of your petitioners, and to decree a right of way over the land so occupied for and in behalf of the plaintiff.

Your petitioners allege that the said defendant Holbrook has no interest whatever in said controversy and claims no interest in and to said lands and that his presence is not necessary to determine the controversy involved in said suit.

Your petitioners further allege that the defendant, W. W. Ferguson, has contracted to sell and convey the lands described in plaintiff's complaint, and — a portion of which plaintiff seeks to obtain a right of way to deprive your petitioners, and said contract is still in force and binding and operative upon the parties thereto, and that by the terms of said contract all of said Ferguson's title, interest, and right in and to said lands passes and is transferred to your petitioners.

And your petitioners further aver that the said plaintiff and your petitioners are all actively interested in said controversy.

Your petitioners further aver that said controversy is one that is separable, and your petitioners herewith offer a bond with good and sufficient surety for their entering in said circuit court of the United States, on the first day of its next session, a copy of the record in

this suit, and to pay all of the costs that may be awarded by
15 said circuit court of the United States if the said court shall hold that this suit was wrongfully or improperly removed thereto, and they pray this honorable court to proceed no further herein except to make the order of removal required by law, and to accept the said surety and bond, and to cause the record herein to be removed into the said circuit court of the United States in and for the district of Utah, and they will ever pray.

BROWN, HENDERSON & KING,
Attorneys for Petitioners.

STATE OF UTAH, } ss:
County of Utah, }

William H. King, being sworn upon oath, deposes and says that he is a member of the firm of Brown, Henderson and King, attorneys for the petitioners in the above-entitled cause; that he has read the foregoing petition and knows the contents thereof, and that the statements and allegations contained therein are true as he verily believes.

WILLIAM H. KING.

Subscribed and sworn to before me this 5th day of December, 1896.

[SEAL.] EDW'D S. FERRY,
Notary Public.

16 Know all men by these presents: that we, as sur*i*ties, are held and firmly bound unto the Rio Grande Western Railway Co. in the penal sum of $200.00 for the payment whereof well and truly to be made unto the said Rio Grande Western Railway Co., its successors and assigns, we bind ourselves, our heirs, representatives, and assigns, jointly and severally, firmly by these presents:

Yet upon these conditions: The Telluride Power Transmission Co., and L. L. Nunn having petitioned the fourth district court of Utah county, Utah, for the removal of a certain cause pending wherein The Rio Grande Western Railway Co. is plaintiff, and W. W. Ferguson, The Telluride Power Transmission Co., L. L. Nunn and L. Holbrook, defendants, to the circuit court of the United States in and for the district of Utah:

Now if the said The Telluride Power Transmission Co., and L. L. Nunn, your petitioners, shall enter into the said circuit court of the United States on the first day of the next session with a copy of the record in said suit, and shall well and truly pay all costs that may be awarded by said circuit court of the United States if said court shall hold that the said suit was wrongfully or improperly removed thereto, then this obligation to be void, otherwise in full force and virtue.

Witness our hands and seals this 5th day of December, 1896.

[SEAL.] L. HOLBROOK.
[SEAL.] SAMUEL A. KING.
[SEAL.]

17 STATE OF UTAH, } ss:
County of Utah, }

L. Holbrook and —— —— of said county, the sureties named in the foregoing bond, being duly sworn, each for himself, deposes and says; that he is a resident of the State of Utah, and a property-holder therein; that he is worth the sum of $200.00 over and above all just debts and liabilities, exclusive of property exempt from execution, and that he has property in the State of Utah of the value of more than $200.00.

[SEAL.] L. HOLBROOK.
[SEAL.] SAMUEL A. KING.
[SEAL.] —— ——.

Subscribed in my presence by said L. Holbrook Samuel A. King and —— —— and by them sworn to before me this 8th day of Dec. 1896.

E. L. JONES,
[SEAL.] *County Clerk, Notary Public, Utah County, Utah.*

18 No. 123. In the fourth district court county of Utah. Petition for removal. R. G. Western R'y Co. plaintiff, *vs.* W. W. Ferguson, The Telluride Power & Transmission Co. and L. L. Nunn *et al.* defendants. Brown, Henderson and King, att'ys for petitioners. Filed Dec. 8th, 1896. E. L. Jones, clerk, by R. E. Knowlden, deputy clerk.

19 Fourth District Court Minutes, Utah County, Utah, December Term, 1896, Wednesday, the 23rd Day of December, 1896.

RIO GRANDE WESTERN RAILWAY CO. }
vs. } # 123.
W. W. FERGUSON ET AL. }

In this cause, the court having heretofore heard and taken under advisement defendants' — for transfer, filed herein, now being fully advised, renders its findings of fact and conclusions of law and denies said petition.

A. C. HATCH, *Judge.*

Fourth District Court Minutes, Utah Co., Utah, December Term, 1896, Saturday, the 16th Day of January, 1897.

R. G. W. R'y Co. }
vs. } # 123.
W. W. FERGUSON ET AL. }

On motion of counsel for plaintiffs, the demurrer of defendants heretofore filed herein to plaintiffs' complaint is overruled and defendants given to and including Jan'y 26th, 1897, in which to answer.

WARREN N. DUSENBERRY, *Judge.*

20 STATE OF UTAH, }
County of Utah. }

District Court, Fourth Judicial District.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
W. W. FERGUSON, THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. Nunn, and L. Holbrook, Defendants.

Messrs. Brown, Henderson and King:

You are notified that the court in this case denied the petition for removal of this cause to the United States circuit court, and that an order denying the motion has been entered.

THURMAN AND WEDGWOOD,
BENNETT, HARKNESS, HOWAT AND
BRADLEY, *Attorneys for Plaintiff.*

Dated December 28th 1896.

We cannot in the interest of our client, postpone entering default, unless an answer is made by Jan'y 4, 1897.

BENNETT, H., H. & B.

Marked on back: # 123. Fourth district court Utah county, R. G. W. R'y Co. *vs.* Ferguson *et al.* Notice, copy served December 29th, 1896. Brown, Henderson & King, att'ys for def'ts. Filed Dec. 29th 1896. E. L. Jones, clerk, by R. E. Knowlden, deputy clerk.

21 IN THE STATE OF UTAH:

In the District Court of the Fourth Judicial District in and for the County of Utah.

THE RIO GRANDE WESTERN RAILWAY CO., a Corporation, Plaintiff,
vs.
W. W. FERGUSON ET AL., Defendants.
} Demurrer.

Now comes the defendants in this cause and demur to the complaint herein (not waiving their first right to the removal of said cause to the United States court as heretofore petitioned) and for cause of demurrer show:

That the said complaint does not state sufficient facts to constitute a cause of action.

BROWN, HENDERSON & KING,
Attorneys for Defendants.

Marked on back: In the State of Utah. In the district court of the fourth judicial district, county of Utah. The Rio Grande Western Railway Co., a corporation, plaintiff, *vs.* W. W. Ferguson *et al.*, defendants. Due service of a copy of within demurrer duly

admitted this 2nd day of Jan. 1897. Bennett, Harkness H. & B. att'ys for pl't'ff. Filed in the district court at Provo Utah Geo. Havercamp clerk by R. B. Thurman, deputy.

22 District Court, Fourth Judicial District, State of Utah, Utah County.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
W. W. FERGUSON, THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. Nunn, and L. Holbrook, Defendants.

Messrs Brown, Henderson & King, attorneys for defendants:

Please take notice that the issue on the demurrer of the defendants to the complaint of the plaintiff herein, will be brought to hearing and argument, before the court at the court-house in Provo, Utah county, Utah, on the 16th day of January inst. at 10 o'clock a. m. or as soon thereafter as counsel can be heard.

THURMAN AND WEDGWOOD,
BENNETT, HARKNESS, HOWAT & BRADLEY, *Attorneys for Plaintiff.*

Marked on back: 123. 4th dist. court. The Rio Grande Western R'y Co. *vs.* W. W. Ferguson *et al.* Notice. Received copy Jan'y 5, 1897. Brown, Henderson & King, attorneys for def'ts. Filed at Provo City, Utah, Jan. 6, 1897. Geo. Havercamp, clerk. By R. B. Thurman, deputy.

23 Fourth District Court Minutes, Utah Co., Utah, December Term, 1896, Saturday, the 16th Day of January, 1897.

R. G. W. R'y Co.
vs.
W. W. FERGUSON ET AL.

On motion of counsel for plaintiff, the demurrer of defendants heretofore filed herein to plaintiff's complaint is hereby overruled, defendants are given to and including Jan'y 26th, 1897 in which to answer thereto.

WARREN N. DUSENBERRY, *Judge.*

24 In the District Court of the Fourth Judicial District, State of Utah, in and for Utah County.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
W. W. FERGUSON, THE TELLURIDE TRANSMISSION COMPANY, ET AL., Defendants.

To Brown, Henderson & King, attorneys for defendants:

You will take notice that on January 16th, 1897 the court over-

ruled the demurrer of the defendants to the plaintiff's complaint and gave defendants ten days from that date in which to answer,

THURMAN & WEDGWOOD,
BENNETT, HARKNESS, HOWAT & BRADLEY, *Attorneys for Plaintiff.*

Dated January 20th, 1897.

Marked on back: 123. R. G. W. R'y Co. *vs.* W. W. Ferguson *et al.* Notice. Received copy within notice Jan'y 20, 1897. Brown, Henderson & King, att'ys for defendants. Filed at Provo City; Utah January 21st, 1897. Geo. Havercamp, clerk.

25 In the District Court of the Fourth Judicial District, Utah County, Utah.

THE RIO GRANDE WESTERN RAILWAY CO., Plaintiff, *vs.* W. W. FERGUSON, THE TELLURIDE POWER Transmission Co., L. L. Nunn, and L. Holbrook, Defendants.	Answer of Tel. Power Tran. Co., L. L. Nunn, & L. Holbrook.

Now come the above-named defendants, The Telluride Power Transmission Co. L. L. Nunn, and L. Holbrook, and answering plaintiff's complaint filed herein, allege:

That they have no sufficient information or belief to answer the first paragraph of plaintiff's complaint, and therefore, deny that plaintiff is a railroad corporation, organized under the laws of the State of Colorado or the Territory or State of Utah, or a corporation at all, or that it still continues to exist as a corporation, or that its corporate name is the Rio Grande Western Railway Co.

And not having sufficient information or belief to answer the second paragraph of plaintiff's complaint, defendants deny that by the alleged articles of agreement of incorporation, or otherwise, defendant was organized or authorized, or still is authorized to acquire, construct, or maintain, or operate various lines of railroad or telegraph in Colorado or Utah, or that it is authorized or organized to acquire, or construct, or maintain, or operate a line from Grand Junction, Mesa county, Colorado to Ogden, or that it has acquired or constructed said line, or any line in Utah.

26 And not having sufficient information or belief to answer the third paragraph of plaintiff's complaint, and basing their denial upon that ground, defendants deny that plaintiff is authorized to construct or operate a line from Provo, Utah county, to a point on the eastern boundary of Utah, or any line passing into or through the counties of Uintah, Wasatch or Utah, or a line from a point at or near Provo, Utah county, to the mouth of the Duschesne fork of Uintah river, Wasatch county, or a line passing into or through the counties of Utah, or Wasatch, or Summit:

And deny that the only feasable route for a railroad from at or

near Provo City and thence northeasterly or easterly by either of said alleged routes, or any route, is to go northeasterly up Provo river to the mouth of Provo cañon, or up said Provo river to the summit of said Wasatch range of mountains, or up said river, or that from the mouth of Provo cañon up said cañon and said river the line of said alleged or any railroad on either side of said alleged routes, or any route, must be in or up said cañon, or that the lines must be identical:

And not having sufficient information or belief to answer the fifth paragraph of plaintiff's complaint, and placing its denial upon that ground, defendants deny that in the year 1889, or at any time, plaintiff was organized, or filed with the Secretary of the Interior, at Washington, D. C. a copy of its alleged articles of incorporation, or due proofs, or any proofs, of its organization under the same or otherwise. Defendants admit that in the summer of 1896, plaintiff ran a line up Provo cañon, but deny, upon information
27 and belief, that on the first of March, 1896, or at any time, it has commenced a survey, or location of a line of railroad from a connection with its alleged main line in Provo to the mouth of Provo cañon, or up said cañon or river, or prosecuted said survey or location with diligence, or prosecuted it at all, or completed the same for a distance of 40 miles from Provo City, or any distance at all, or that it surveyed or located any line from a point near Provo City near the mouth of Provo cañon up said canyon or river northeasterly, or otherwise, for a distance of 20 miles, or any miles, or that said alleged survey is upon the line or any line of route specified in said alleged charter, or upon surveyed or unsurveyed lands of the United States.

And, upon information and belief, defendants deny that plaintiff has made a map of said alleged surveyed or located line, or that said alleged survey or location has been adopted by plaintiff as a definite location thereof, or adopted at all, or that plaintiff has commenced, or is prosecuting the construction of its railroad on said line, or any line. Defendants admit that certain persons claiming to be the agents of said alleged plaintiff have, during the summer and fall of 1896, run uncertain and irregular lines up said Provo canyon, cut brush and made slight and unimportant excavations which, from their character, give no evidence of any purpose or design upon the part of any person to survey or construct any line of railroad. Defendants deny that plaintiff made any line or survey as alleged
28 in said survey, but admits that the uncertain and irregular line run by said persons mentioned in the foregoing paragraph in this answer pass over and into certain tracts of unsurveyed land:

And deny that the claim of Ferguson commences at a fence described in said complaint, but upon the contrary defendants allege that it commences some distance southwesterly and down the river from said fence;

And deny that said Murphy occupies, or ever did occupy any land adjoining said lands occupied by said Ferguson, or *or* in said cañon; and deny that plaintiff surveyed any line of railroad, or located one,

or that the said alleged line is over or on said lands; and deny that plaintiff has appropriated for railroad purposes, or for any purpose, or for right of way or for its track, or for railway fixtures or appurtenances, or otherwise, or at all, a strip of land 200 feet wide, or any land, or that the said alleged strip is 100 feet wide, or any number of feet on each side of said alleged center line of said survey or proposed track, or that the plaintiff has appropriated for any purpose said land described in said complaint containing 22 acres, or any number of acres, or that said alleged strip of land, or any land, is necessary to plaintiff for the construction or operation of its said alleged line of railroad; admit that a map was annexed to said complaint as an exhibit, but deny that said map contains the line, or any route of railroad, or location, or survey of one over or through the land claimed or occupied by said Ferguson;

And deny that plaintiff is the owner of said strip of land, or any land, or that said strip of land is necessary for its use or that upon payment of damages occasioned to the occupant or owner by the construction or maintaining or operating of said alleged railroad plaintiff is the owner of said premises;

Said defendants deny that said Holbrook asserts or claims any interest in or to said premises, or that the same have been appropriated by the said plaintiff;

And the said defendants herein protest and object to said court exercising any jurisdiction over the defendants herein or the subject-matter of this controversy, and they and each of them do hereby deny that said court has any jurisdiction over them, or over said subject-matter; that it has no right to hear said *said* cause, or to require said defendants to answer herein, and they hereby expressly aver that in answering said complaint they do not submit to the jurisdiction of said court, or waive their rights to object to the trial of said cause by said court, or to move to dismiss the same, or to remove said cause to the circuit court of the United States in and for the district of Utah, or such Federal court having jurisdiction over the controversy and of the parties hereto.

Further, by the way of answer the said defendants, The Telluride Power Transmission Co., and L. L. Nunn affirmatively allege; that the said Telluride Power Transmission Co. is a corporation duly organized and existing under the laws of Colorado, the stockholders thereof being citizens of the United States, and all the stock of said corporation being owned by citizens of the United States; that said corporation was organized among other things for the purpose of acquiring by purchase, or otherwise, water rights, ways, and power and to work, develop, and utilize water rights, power, ways, mills, etc. for such business and enterprises as appertain to the same; that the said L. L. Nunn, at all times herein mentioned, was and still is a citizen of the United States; that Provo river, after leaving Wasatch valley in Wasatch county, enters upon a cañon which is wide at various points therein, and flows a distance of about 20 miles in said cañon before emerging into what is known as Utah valley, in Utah county; that said river in the springtime and periods of high water flows large quantities of water which are

not used for agricultural or any other purposes, and which, by means of said river, flow down and escape into Utah lake, but that in the summer season and during the period of irrigation said river becomes low and flows but a small quantity, as compared with the amount therein in periods of surplus as aforesaid; that said cañon is well adapted for a reservoir in which can be stored the surplus and unused waters as aforesaid; that in periods of low water the amount so flowing down said cañon is inadequate for the wants of the people residing in said Utah valley for agricultural and domestic purposes; that said Utah valley is populous and contains many large cities and towns which require heating, and lighting, and power for manufacturing purposes, and within short distances of said cañon are large mining camps in which many important and producing mines are operated; that in the operation of said mines and the machinery used about the same and connected therewith, power is essential and necessary and is only obtained by the burning of coal and coke, and at a great expense; that the production of electrical power for the operation of machinery and plants, and for lighting, heating, and for manufacturing and other pursuits has become an important enterprise, and one which is of immense advantage to all persons and localities and is superceding other
31 means of supplying the necessary power to carry on said enterprises; that said defendants for years have engaged in acquiring water rights for power purposes, and in the year 1894 they entered upon said Provo cañon and had extensive surveys made with a view to determining whether power could be obtained with which to supply said towns and cities in Utah valley, and said mining camps, and also whether by reservoiring the surplus water additional power could be obtained and water secured for irrigation and domestic purposes, that said surveys were prosecuted with diligence and the said defendants in said year determined to acquire in said cañon water rights for the purpose of generating electrical power and to irrigate lands in said valley below; that the greater part of said lands in said cañon were unoccupied and unsurveyed and were, except in few places, of but little or no value except for the purposes designed by said defendants; that defendants began the construction of a flume and made the necessary excavations therefor in order to obtain power with which to aid in the construction of a large dam by which to reservoir and hold back the waters of said river for power and irrigation purposes; that said defendants made the necessary surveys for canals for the purposes aforesaid and surveyed a reservoir, and showed upon the surveys the contour of the line thereof, and prosecuted with due diligence the work necessary for the consum-ation of the enterprise entered upon; that in the winter and early spring of 1896, the said defendants vigorously prosecuted said work and expended large sums of money in the execution of said design and purpose; that long prior to 1896 in good faith they entered upon said public unsurveyed lands of the United States with the design and specific purposes of constructing in said cañon
32 at a point at or near what will be, when surveyed, as nearly as defendants can determine, the southwest quarter of the

southeast quarter of sec. 27, township 5 south, range 3 east, a dam by which to reservoir and store said surplus waters of Provo river; that they surveyed said reservoir extending the lines of survey up said river from said point to a point at or near the northeast corner of the northeast quarter of the southwest quarter of sec. 7, township 5 south, range 4 east, in Wasatch county, Utah; and said defendants have further located and surveyed the necessary canals connected with said reservoir for the purpose of carrying into effect the enterprise and business entered upon by them, that since the year 1894 as aforesaid, the said defendants have been in the actual possession and occupation of the land in said cañon between said points, and which is intended by them as a reservoir, and also other portions of the public domain lying west of said reservoir and in said cañon, except that the claim of defendant Ferguson, lying within said reservoir, has been occupied by said Ferguson as a residence, but defendants allege having paid said Ferguson a large sum of money and have obtained a contract from him by which he covenants and agrees to convey all his interest in the premises so occupied by him to the said defendants.

Defendants further aver, that their possession of said lands in said Provo cañon has been open and notorious; that it has been actual and *bona fide*, and the said defendants have, in good faith, prosecuted with vigor the enterprise engaged in, and have expended a large sum of money, to wit: more than $50,000.00 in said enterprise, and they aver it has been and is their intention and purpose to construct said dam and to store the waters of said river in the reservoir so constructed, and to use the same for the generation of electrical power for the purposes aforesaid, and also for irrigation purposes.

33

Defendants further aver, that by means of said dam they will be able to obtain more than 8,000 horse-power which will be sufficient to supply said Utah county and the towns and cities therein with power for heating, lighting, manufacturing purposes, and said mining camps, and will prove a great and lasting benefit to said cities and the persons using the same as well as a great advantage and financial benefit to the State of Utah and its inhabitants.

In addition thereto defendants aver, that by means of the water so stored and husbanded they will be enabled to supply water for irrigation purposes and larger quantities of unoccupied, barren and sterile public land will be brough- into cultivation to the permanent advantage and prosperity of her people.

Defendants further aver that said plaintiff some time in the summer of 1896, wrongfully, and for the purpose of annoying the said defendants and interfering with their project and enterprise, came into Provo cañon and ran irregular, indefinite and devious lines through a portion of said cañon pretending that it was the purpose to establish a railroad therein, and defendants allege that said lines so run were so irregular and uncertain, so shifting and changing, as to indicate no such purpose; that in two or three points in said cañon various persons claiming to represent plaintiff made slight excavations, but the character of the same was such as to indicate

no purpose to construct a railroad or to perform intelligently and with a fixed or settled purpose any work or enterprise.

34 Defendants allege upon information and belief that said plaintiff has no purpose or design to construct any railroad, but that what has been done has been with a view to annoy defendants and to prevent said defendants from constructing their reservoir and canals and obtaining electrical power for the purpose aforesaid, and for the purpose of preventing any legitimate railroad undertaking from being consum-ated, if the operation of a line through said cañon was essential.

Defendants allege that the construction of a railroad along the bottom of said cañon would be destructive of their enterprise and reservoir and power, and would prevent them from carrying out the work in which they have been engaged long prior to the spasmodic, uncertain, and *mala fides* entry of said plaintiff into said cañon, and in which they are still engaged.

Defendants further allege that they are in the possession of said land described in said complaint, and acquired the Ferguson land as well as other lands in said cañon as above set forth, and that while in possession, and while engaged in the construction of canals, flumes, reservoirs, in the making of surveys, and while in the actual, visible, notorious, open and peas-able possession of said public domain and the said lands so settled upon by said Ferguson, persons, claiming to represent the said plaintiff entered said cañon and pretended that they desired to survey across said land; and the said defendants The Telluride Power Transmission Co., and said L. L. Nunn aver that they have been and were, long prior to the coming of said persons so claiming to represent said plaintiff into said cañon, in the actual possession and occupation of said premises for the purpose aforesaid, and that the said plaintiff, no mat-

35 ter what its intention was or may be, had no right to intrude upon the possession and occupation of the said defendants or to prevent them from carrying out their enterprise so important and beneficial to the people of Utah;

That if said plaintiff be permitted to construct said railroad or any railroad along the bottom of said cañon and over the site of said reservoir, and over the land described as the Ferguson land in said complaint defendants' enterprise will be destroyed, they will be despoiled of the rights acquired by them, and they will suffer great and irreparable damage and injury.

Defendants aver that said enterprise and the work so undertaken by them and said reservoir and the site thereof are of great value, to wit; of the value of more than $500,000.00, and that if a railroad should be constructed along the bottom of said cañon they would be damaged in a sum exceeding *in* said amount; that the construction of said dam and reservoir and the creation thereby of electrical power for the purposes aforesaid and to the extent aforesaid, and the obtaining of water for agricultural and domestic purposes as aforesaid are of higher and infinitely greater importance than the construction of a line of railroad through said cañon, and the exercise of the right of eminent domain contended for by plaintiff in

said complaint over the land in said complaint described would prevent defendants from completing said enterprise and render valueless all they had done.

And defendants deny that said plaintiff can exercise the right of eminent domain as against the said defendants and for the purpose of destroying an enterprise and work of such magnitude as that upon which defendants have entered, and they allege that it is not within the contemplation of the statutes to allow the right of eminent domain to be exercised under circumstances such as are alleged
36 herein and as prevail in this case, and that this court has no right to entertain plaintiff's complaint, or to grant the relief prayed for in said complaint.

Defendants further aver that said plaintiff well knew defendants' intention and the character and extent of their claims, the possession and occupation of said lands, and said reservoir site long prior to the time when said persons claiming to represent said plaintiff entered said cañon to run said irregular and uncertain surveys, and that to permit the said plaintiff to condem- said land and to deprive defendants of their possession of said public domain, and to deprive them of their interest, and property in and to said land described in plaintiff's complaint, and to destroy their said enterprise and to compel them to vacate and abandon said cañon and said reservoir and the canals and work done and performed by them would be a gr-evious wrong and a fraud upon their rights.

The said defendants and said Holbrook aver, that said Holbrook has no interest in and to said controversy.

Wherefore said defendants pray that said court refuse to entertain said complaint, or to assume jurisdiction of the alleged cause of action therein set forth, or to grant any relief to said plaintiff, or to condem- or dispos-ess defendants of said lands herein described and in said complaint set forth.

Defendants further aver that said plaintiff take nothing by its complaint and that defendants may have their costs herein expended.

BROWN, HENDERSON & KING,
Attorneys for Defendants.

37 STATE OF UTAH,)
County of Salt Lake,) *ss:*

William H. King being duly sworn, says: That he is one of the attorneys for the above-named defendants; that he has read the foregoing answer, and knows the contents thereof, and that the same is true of his own knowledge, except as to matters therein stated upon information and belief, and as to those matters he believes it to be true. That he makes this verification upon information conveyed to him by said defendants and other persons, and because said defendants are not within the county of Salt Lake, that being the county in which affiant resides.

WILLIAM H. KING.

Subscribed and sworn to before me this 1st day of Feb'y, 1897.
[SEAL.] EDW'D S. FERRY,
Notary Public.

38 # 123 In the fourth district court, county of Utah. Answer. R. G. Western R'y Co., plaintiff, *vs.* W. W. Ferguson, The Telluride Power Transmission Co., L. L. Nunn and L. Holbrook, defendants. Brown, Henderson & King, for defendant*d*. Filed at Provo City, Utah; Feb. 2, 1897. Geo. Havercamp, clerk. By R. B. Thurman, deputy.

39 In the District Court of the Fourth Judicial District, County of Utah, State of Utah.

THE RIO GRANDE WESTERN RAILWAY Company, Plaintiff,
vs.
W. W. FERGUSON, THE TELLURIDE Power Transmission Company, L. L. Nunn, ans L. S. Holbrook, Defendants. } Answer of W. W. Ferguson.

Now comes the above-named defendant W. W. Ferguson, and answering the plaintiff's complaint filed herein denies the jurisdiction of this court over the subject-matter of said complaint, and protests against said court trying said case and states that he has not sufficient information or belief to answer the first paragraph of the plaintiff's complaint and therefore denies that plaintiff is a railroad corporation organized on or about the 9th day of July, 1889, or at any time, under the laws of Colorado or the Territory now State of Utah, or that it still continues to exist as a corporation, or that its corporate name is the Rio Grande Western Railway Company. And upon information and belief denies that by said alleged articles of agreement of incorporation or otherwise, it was organized or authorized or still is authorized to acquire or construct or maintain or operate various or any lines of railroad or telegraph in Colorado or Utah, or a line from Grand Junction, Colorado to Ogden, Utah, or that it has acquired or constructed or operated said or any line; and not having sufficient information or belief to answer the third paragraph of plaintiff's complaint, and placing his denial upon that ground, defendant denies that plaintiff is authorized to construct or operate a line in Utah a line in Provo, in
40 Utah to the eastern boundary of Utah, or a line through the counties of Uintah, Wasatch or Utah, or a line from Provo to a point near the mouth of Duchesne fork of the Uintah river in Wasatch county, or a line passing through said county of Uintah, Wasatch or Summit; or that the only feasible route for said or any railroad from Provo City and thence northeasterly and easterly as by alleged route or otherwise, is to go northeasterly up or in the direction of Provo river to the mouth of Provo cañon, or thence up said Provo river or cañon to the summit of the Wasatch

range of mountains or that from the mouth of Provo cañon up said cañon and said river, the line of railroad of either said alleged routes must be in or up said cañon, or that the lines for that distance are identical; but upon the contrary the defendant alleges that there are other and more practicable and feasible routes for the railroad than that described in said complaint;

And upon information and belief denies that in the year 1889, or at any time plaintiff filed with the Secretary of the Interior at Washington D. C. a copy of its articles of incorporation or any articles of incorporation; or due or any proof of its organization; or that the same is organized; and denies that on or about the first of March, 1896, or at all, it commenced a survey of location of a line of railroad over and connected with its said alleged main line in Provo City, to the mouth of Provo cañon and thense up the said cañon, or that it commenced the survey of location of any line of railroad or that it prosecuted said alleged survey of location with diligence or at all, or completed the same for a distance of forty miles from Provo City, or any number of miles; or that the
41 said survey or location is as described in said complaint; or is upon surveyed or unsurveyed land of the United States, but defendant admits that some time during the summer and fall of 1896, certain persons claiming to represent said plaintiff ran an irregular and uncertain and indefinite lines of survey up Provo cañon, but from the character of said lines as indicated by stakes and otherwise, defendant believes and therefore alleges that the same is not a line for a railroad route, and that it would be impossible to construct a railroad according to the devious, crooked and uncertain lines run by said persons.

And upon information and belief, defendants deny that plaintiff has made a map of said alleged survey or located line, or that said survey or location has been adopted by plaintiff as the definite location thereof, or as any location; or that plaintiff has commenced or is prosecuting the construction of its railroad or any railroad on said lines or any line.

But upon information and belief, denies that said lines of survey or location as described in plaintiff's complaints, passes over a tract of unsurveyed land of the United States, but admits that a line run by said persons aforesaid, does pass over certain unsurveyed lands of the United States in Provo canyon and which when surveyed may approximately be parts of the sections described in said complaint.

Defendant admits that he claims and has claimed, for a long — prior to plaintiff's alleged survey a right to certain lands in Provo canyon, which are unsurveyed; but denies that the defendant's claim commenced at a fence between the lands he claims to
42 occupy and the lands below and southwesterly, or that the said A. L. Murphy occupies any lands adjoining said defendant, or any lands at all in said Provo canyon; but upon the contrary defendant alleges that he is the owner of 160 acres of land, situated in Provo canyon, the exact boundaries and description of which he cannot give, which land so claimed by him is upon un-

surveyed lands of the United States. And denies that said alleged line of railroad is located over or upon said lands; and denies that plaintiffs has appropriated for railroad purposes, or any purposes or appropriated at all, or for a right of way of its track or for ground for railway fixtures or appurtenances a strip of land 200 feet wide or any land whatever, or 100 feet wide, on each side of the alleged line of survey, or proposed track as stated in said complaint, or that the strip of land so alleged to have been appropriated by said plaintiff contains 22 acres or any number of acres, or that said alleged strip of land 100 feet wide on each side of said center line of survey, or any land whatever is necessary to plaintiff for the construction or operation of said alleged line of railway or any railway:

Admits that there is a map containing certain figures and lines attached to said complaint, but denies upon information and belief, that it is a map of any line or route of railroad or location or survey, and denies that the plaintiff is the owner of said or any land, or that said land or any land is necessary for its use, or that defendant's ownership is subject to the payment of damages occasioned by the constructing or maintaining or operating of said alleged railroad or that it is subject at all to any claim or pretended claim of said plaintiff; and denies that said plaintiff has appropriated any of said land.

43 Further by way of answer defendant affirmatively alleges that more than ten years ago he settled upon certain vacant, unoccupied and unsurveyed lands of the United States, situated in Provo canyon, and lying upon both sides of said Provo river, and then and there made valuable and lasting improvements upon said premises; that he constructed a house thereon and has lived continuously upon said premises until the present time, and that the same has been and is his only home; that he fenced a portion of said premises, took out the water from said river, grubbed and cleared the brush thereon and had raised agricultural crops upon a portion of said land and greatly improved the same.

That defendant in good faith entered upon said premises with the view to obtaining title thereto as soon as said lands should be entered, and he has from the date of entry upon said premises until the present time in good faith resided upon said premises, and occupied, possessed and held the same and claimed the ownership and title thereof against all the world, except that as alleged in said complaint defendant has contracted with the said defendants, The Telluride Transmission Power Company, and L. L. Nunn, to sell and dispose of all of said lands, to wit: the said 160 acres, so owned, occupied, held and possessed by him, for the purpose of enabling the said defendants to use the same for a reservoir upon which to store water for electr-al power, manufactoring and agricultural purposes. That the said defendants have paid to said defendant herein answering large sums of money, for his interest, title and property therein, and the said defendant has promised and agreed by and with the said defendants so named to convey to them by good and sufficient deed and indefeasible title to said premises.

44 And the said defendant occupies and holds said premises subject to said contract. That said defendant at the time of entering upon said premises, was and still is a citizen of the United States. That said occupation and possession of said premises was as stated in good faith, and for the purpose of obtaining title from the United States thereto; and said possession and occupation has been notorious, peaceable and exclusive from the time defendant entered thereon, until the present time, except as hereinafter stated.

Defendant upon information and belief alleges, that said premises for the purposes for which designed by said defendants are of great value, to wit of the value of more that a half million of dollars, and that the construction of a railroad over said premises and the operation of the same would prevent the said defendants from using the said premises for the purpose designed, and would compel the said defendants to abandon their said enterprise to their great and irreparable loss and injury; and defendant further alleges that said property is valuable for agricultural purposes, and that the construction of a line of railroad over the same would render the same valueless and useless for agricultural purposes. That said land is not subject to the right of eminent dominion and that the court cannot condemn said land and destroy defendants' enterprise, reservoir and power.

Further by way of answer and as a cross-complaint, defendant alleges, that he is the owner, in the possession, and entitled to the possession of one hundred and sixty acres of land, situated in Provo canyon, Utah county, Utah, which said lands are upon unsurveyed lands of the United States. That said defendant has been in possession of said lands for many years last passed and has occupied the same for a home and has made lasting and valuable improve-

45 ments thereon. That he has entered into a contract with the Telluride Power and Transmission Company, a corporation organized under the laws of Colorado, and L. L. Nunn, to sell and dispose of, to them, the said premises, for the purpose of enabling the said defendants to occupy and use the same in connection with other lands in said canyon, for reservoir purposes, that water might be stored in order to operate power plants, and to use the same for irrigation and agricultural purposes.

Defendant alleges that he was at the time of entering upon sais premises, and now is a citizen of the United States, and entered upon said land in good faith, for the purpose of acquiring title thereto, as soon as said lands were surveyed, and that he has exclusively occupied said premises from the time of entering thereon until the present, and has used a portion of the same for agricultural purposes and redeemed them from sterility and barrenness, and used water thereon and made them valuable and productive. That certain persons claiming to be representatives and agents of the Rio Grande Western Railway Company, on or about the — day of August, with axes and with force and violence, entered upon said premises and cut down and destroyed certain trees growing thereon, and threatened and still threatens to enter upon said premises and

to cut down and destroy trees growing thereon, and improvements there situated, in a forcible and violent manner.

Defendant alleges that said acts of trespass if continued may lead to breaches of the peace, and constitute serious and irreparable loss, injury and damage to said defendant and to said premises.

Wherefore, defendant prays: That plaintiff may take
46 nothing by its complaint: that the said defendant be adjudged and decreed to be the owner of said premises, subject only to the paramount title of the United States, and to said contract so made with said defendants; and that the said plaintiff, its agents, employees and representatives be perpetually enjoined and restrained from entering upon the said premises or in any manner interfering with the defendant's occupation and possession thereof.

Defendant prays for general relief and for his costs herein expended.

BROWN, HENDERSON & KING,
Att'ys for Defendant.

STATE OF UTAH, }
County of Salt Lake, } *ss:*

William H. King, being sworn on oath says: That he is one of the attorneys for the above-named defendant, that he has read the foregoing answer and cross-complaint, and knows the contents thereof; that the same are true of his own knowledge, except as to the matters therein stated upon information and belief, and as to such matters he believes them to be true. That the reason of this verification being made by him, is because the said Ferguson, is absent from the county of Salt Lake; that being the county in which affiant resides, and that he makes this certification by reason of information conveyed to him by the said Ferguson, and because of information derived from papers now in his possession.

WILLIAM H. KING.

Subscribed and sworn to before me this 1st day of February, 1897.

[SEAL.] EDWARD S. FERRY,
Notary Public.

47 # 123. In the fourth judicial district court, Utah county, Utah. The Rio Grande Western Railway Co. plaintiff, *vs.* W. W. Ferguson, *et al.* Answer of W. W. Ferguson. Filed at Provo City, Utah, Fer. 2, 1897. Geo. Havercamp, clerk. By R. B. Thurman, deputy.

48 Fourth District Court, Utah County, Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
W. W. FERGUSON, THE TELLURIDE POWER TRANSMISSION Company, L. L. Nunn, and L. Holbrook, Defendants. } Affidavit.

STATE OF UTAH, }
County of Utah, } ss:

E. A. Wedgwood, being first duly sworn upon his oath says:

That he is one of the attorneys for the plaintiff in the above-entitled action.

That on or about the 12th day of September, 1896, the above-named plaintiff commenced an action in this court against the above-named defendants, the object of which was to condemn for right of way for plaintiff's railroad certain lands of the unsurveyed public domain situated in what is known as Provo canyon, Utah county, Utah.

That affiant is informed and believes that W. W. Ferguson, one of the above-named defendants died intestate on or about the 19th day of February, 1897.

That the heirs-at-law, and the only heirs-at-law of the said W. W. Ferguson, deceased, are Sarah Ferguson, his wife, Frederick Ferguson, his son, and William Ferguson, his son, and that the said Frederick Ferguson and William Ferguson are over the age of twenty-one years.

That affiant is informed and believes that no administrator has been appointed in the matter of the estate of said W. W. Ferguson, deceased, and that no application for the appointment of an administrator of said estate has been made in this or any other court.

That the said Sarah Ferguson, William Ferguson and Frederick Ferguson, nor either or any of them have made application to have the said action continued in their name, nor have they or either of them made application to be substituted as parties defendant in place of the said W. W. Ferguson, deceased.

That affiant is informed and believes that said Sarah Ferguson, Frederick Ferguson and William Ferguson claim some interest in the premises sought to be condemned by plaintiff in this action, as heirs-at-law of the said W. W. Ferguson, deceased.

48½ Wherefore plaintiff prays that the said Sarah Ferguson, Frederick Ferguson and William Ferguson be substituted as parties defendant in said action in place of said W. W. Ferguson, deceased, and that the said action be continued against them.

E. A. WEDGWOOD.

[SEAL.] Subscribed and sworn to before me this 16th day of March, 1897.

THOMAS JOHN,
Notary Public.

Marked on back: No. 123. 4th dist. court Utah county Utah Rio Grande West. R'y Co. *vs.* W. W. Ferguson *et al.* Affidavit Filed at Provo City Utah March 16th 1897 Geo. Havercamp clerk

49 STATE OF UTAH:

Fourth Judicial District Court, Utah County.

RIO GRANDE WESTERN R'Y CO.
vs.
L. L. NUNN, TELLURIDE POWER & TRANSMISSION CO., Impleaded with Ferguson.

STATE OF UTAH, }
County of Utah, } *ss*:

Arthur Brown having — sworn deposes and says; I am one of the attorneys for defendants. The defendants have made statement to me of the facts of this case which I verify to be a full and fair statement of all the facts in this case.

After such statement made as aforesaid I have advised said defendants that they have a good & meritorious defense upon its merits.

I am also familiar with many of the facts of this case, from having tried another case between the same parties involving some of the questions involved in this.

50 The defendants are unable to proceed to trial in this cause and cannot safely proceed to trial, in consequence of the absence of L. L. Nunn one of the defendants and manager of the defendant company. And the fact that no witnesses have been subpænaed or preporation made at this term for the trial of said cause that the reason for not having the proper preporations is that defendant was not aware that said cause had been set for trial until today the 15th day of March 1898. That he received no notice of said setting whatever.

That in the early part of last week, on or about March 8, inst. deponent received a telegram from said L. L. Nunn from the Holland house N. Y. saying that he had been detained in the East unavoidably and asking if it was possible to pos-pone this case. Defendant had not heard that this case was liable to be brought to trial

51 in the near future and was surprised at the telegram, but at once telephoned from Salt Lake where I reside to the clerk at Provo and asked him if said cause was liable to be brought to hearing soon. In reply he asked me if the case was set. I said "Not that I know of." He said that I would know it if it had been set and that he thought it was not set. That the judge of court was away and it was expected that court would be called March 14,: that cases formerly set were to be determined first and then a new setting of other cases would be made for some future dates. This was the substance of the talk over the telephone. Assuming from that talk that said case would not be reached this week at least. I telegraphed Mr. Nunn, that case was not set, that court was East, and

probably there would be time for him to come after it should
52 be set. I cannot remember the exact language. I have neither telegrams with me. Hearing at Nephi yesterday that court was in session here, I this morning March 15th, telephoned Mr. Wedgwood to ascertain what was done about this case, and then for the first time ascertained that it had already been set and was liable to be called for trial within 24 hours.

The defendants are not ready to go to trial because Mr. Nunn is needed both as a witness and a party defendant.

As a party defendant to advise and assist in the management of the case, and inform his counsel of any directions or suggestions that defendants might desire to make, and to procure other witnesses. Mr. Nunn is himself a lawyer and deponent has depended upon his assistance and advice in said cause. As a witness I expect to prove by him all the facts sworn to by him in the case of said plaintiff against said defendant impleaded with L. Holbrook heretofore tried in this court and taken to supreme court of this State and now pending on a writ of error in the Supreme Court of the United States.

53 And in addition thereto that the property involved in this litigation would be in the deepest part of the reservoir described in his testimony there and it would be impossible to construct said dam and reservoir without the piece of property described in this complaint, or if said plaintiff had a right of way for a railroad over the same. And therefore the value of this piece of land is the value of the privegege of building such dam, and obtaining the water power described in this testimony, amounting to several hundred thousand dollars. That there is no other witness within the jurisdiction of the court by whom defendants can prove the same facts, as by L. L. Nunn, and by whom they can establish the value of the property for the purposes for which the defendants desire to use the same.

That said L. L. Nunn left the State of Utah on the 13th day of February intending to go to St. Louis on a short business trip, not expecting to be gone over two weeks as he informed deponent.

54 Defendant further says that among other witnesses used on the former trial of the other case referred to whose testimony is necessary in this were witnesses Cromer, Madden and P. L. Nunn, and defendant expects to prove the same facts by them that they testified to on said trial, and by P. L. Nunn also the value of such a plant as defendants proposed to erect and the cost of the same. And thereby the value of this piece of land to defendants.

That each of said witnesses are now out of the State of Utah. Said P. L. Nunn started a week ago viz. to go to Arizona for his health.

That defendants cannot safely proceed to trial without the testimony of said witnesses.

This application is not made for delay merely but that a full and fair trial may be had on the merits.

ARTHUR BROWN.

Subscribed and sworn to before me this 16th day of March, 1898.

[SEAL.] GEO. HAVERCAMP, *Clerk*,
By A. V. ROBINSON, *Deputy*.

Written on back: 123. Rio Grande W. R'y Co. *vs.* W. W. Ferguson, *et al.* Affidavit. At Provo City, Utah. Filed March 16, 1898. Geo. Havercamp, clerk. By A. V. Robinson, deputy.

55 First District Court, Utah County, Utah.

THE RIO GRANDE WESTERN RAILROAD COMPANY, Plaintiff,
vs.
W. W. FERGUSON, THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. Nunn, and L. Holbrook, Defendants. } Order.

Upon reading and filing the affidavit of E. A. Wedgwood, dated March 16th, 1897, and upon the papers and files in this cause, and on motion of E. A. Wedgwood, of counsel for plaintiff, duly made in open court this 16th day of March, 1897,

It is ordered that Sarah Ferguson, Frederick Ferguson and William Ferguson, heirs-at-law of W. W. Ferguson, deceased, defendant in said cause be substituted as parties defendant in place of the said defendant W. W. Ferguson, deceased, and that said action proceed againse the said Sarah Ferguson, Frederick Ferguson and William Ferguson as defendants therein, and that summons issue in said action and be served upon them.

Done in open court this 16th day of March, 1897.

WARREN N. DUSENBERRY, *Judge*.

Marked on back: #123. Fourth district court Utah county, Utah. The Rio Grande Western R'y Co. *vs.* W. W. Ferguson *et al.* Order. Filed at Provo City, Utah, Mar. 16, 1897. Geo. Havercamp, clerk.

56 Fourth District Court Minutes, Utah Co., Utah, March Term, 1897, Tuesday, the 16th Day of March, 1897.

R. G. W. R'y Co.
vs.
W. W. FERGUSON ET AL.

In this cause the petition of plaintiff asking that Sarah Ferguson, Frederick and William Ferguson be made parties defendant herein, came on regularly to be heard and after hearing the petition and statement of plaintiff's attorney, and it appearing to the court that Sarah Ferguson, Frederick Ferguson and William Ferguson are the heirs of W. W. Ferguson, deceased, it is here ordered that said Sarah Ferguson, Frederick Ferguson and William Ferguson be and they are declared to be parties defendant in the above-entitled cause, and that an order be made in accordance therewith and signed and filed.

WARREN N. DUSENBERRY, *Judge*.

57 In the District Court of the Fourth Judicial District of the State of Utah, Utah County.

THE RIO GRANDE WESTERN RAILWAY COMPANY, a Corporation, Plaintiff,
vs.
W. W. FERGUSON, THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, L. HOLBROOK, SARAH FERGUSON, FREDERICK FERGUSON, and WILLIAM FERGUSON, Defendants. } Summons.

The State of Utah sends greeting to W. W. Ferguson, The Telluride Power Transmission Company, L. L. Nunn, L. Holbrook, Sarah Ferguson, Frederick Ferguson, and William Ferguson, defendants:

You are hereby required to appear in an action brought against you by the above-named plaintiff, in the district court of the fourth judicial district of the State of Utah, Utah county, and to answer the complaint filed therein, within ten days (exclusive of the day of service) after the service on you of this summons—if served within this county; or if served out of this county, but in this district, within twenty days; otherwise within forty days, or judgment by default will be taken against you, according to prayer of this complaint.

This said action is brought to obtain out of this court a judgment against the defendants herein, condemning to the use of plaintiffs for a right of way for its railroad and for railroad uses, all the right title and interest of the defendants, in and to a strip of land 200 feet wide, being 100 feet wide on each side of the center line which beginning on the southwest boundary line of lands occupied by the defendant Ferguson at a fence, the point being 715 feet more or less north, and 200 feet more or less west, from where it is computed the southeast corner of section 27 township 5 south of range 3 east of the Salt Lake meridian will be located when said township is subdivided by Government survey, and running thence northeasterly up the Provo river and Provo canyon and following near to the course of said river, a distance of 4,800 feet more or less to a point 1,600 feet more or less northeasterly from the confluence of the South fork of the Provo river with the Provo river and containing 22 acres, more or less; that the extent of the occupation of the defendants, if any may be ascertained and the damages to the occupants adjudged. For cause of action plaintiff alleges: that plaintiff is a railroad corporation duly organized and existing under the laws of the State of Utah, organized and authorized to construct and operate various lines of railroad and telegraph in said State of Utah, and among others a line from Grand Junction in Mesa county, State of Colorado to Ogden in Weber county, State of Utah, passing through the city of Provo in the county and State of Utah, and that it has acquired and constructed, and for several years operated said last-mentioned line; that among other lines of railroad which the plaintiff is authorized to construct and operate in Utah, are lines on and over from the

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city of Provo in Utah county to a point on the eastern boundary line of Utah where the same — crossed by the valley of the White river, into and through the counties of Uintah, Wasatch and Utah; that the only feasible route for a railroad from at or near Provo City, and thense northeasterly and easterly is up or in the direction of the Provo river in the mouth of Provo canyon and thence up said Provo river and canyon a distance of thirty miles more or less from the city of Provo, and that from the mouth of Provo canyon up said canyon and river, the line of railroad must be in and up said canyon; that in the year 1889, the plaintiff filed with the Secretary of the Interior, at Washington D. C. a copy of its articles of incorporation and due proof of its organization under the same; that on or about March 1st, 1896 plaintiff commenced a survey and location of a line of railroad from a connection with its line in Provo City to the mouth of Provo canyon and thence up said canyon and Provo river, and prosecuted said survey and location with diligence and completed the same for a distance of forty miles from the city of Provo; that the plaintiff has made a map of said surveyed and located line and has commenced and is prosecuting *of* its railroad construction on said line; that defendant W. W. Ferguson had or claimed, prior to plaintiff's survey, some possessory right by occupation of said land or some part thereof; that plaintiffs — the owner of said land necessary to its use, subject only to the payment of damages occasioned to the occupant by constructing, maintaining and operating its railroad thereon; that defendants The Telluride Power Transmission Co. L. L. Nunn and L. Holbrook, claim some interest in or to said lands; that defendants are the only persons and parties in possession or claiming any right to said lands or any part thereof, so far as is known to plaintiff. For further particulars see plaintiff's complaint on file in my office.

And you and each of you are required to appear and show cause within the time aforesaid, why the property described should not be condemned as prayed for in the complaint.

And you are hereby notified that if you fail to appear and answer the said complaint as above required, the said plaintiff will apply to the court for the relief demanded in the complaint and cost of suit.

Witness, the Hon. — N. Dusenberry, judge and the seal of the fourth district court of the judicial district, in and for [SEAL.] the county of Utah, State of Utah, this 16th day of March, in the year of our Lord one thousand eight hundred and ninety-seven.

GEO. HAVERCAMP, *Clerk.*

58½ *Return of Officer.*

STATE OF UTAH, } ss:
Utah County, }

OFFICE OF SHERIFF OF UTAH COUNTY.

I hereby certify that the within summons came into my possession on the 16th day of March, 1897, and that on the 16th day of March 1897, in the city of Provo, Utah county, State of Utah, I

served the same upon the within named defendant Sarah Ferguson by delivering to and leaving with the said defendant Sarah Ferguson personally a true copy of the within summons.

I further certify that on the above-named date four miles north of Provo City, Utah county, State of Utah, I served the same upon the within-named defendants Frederick Ferguson and William Ferguson by delivering to and leaving with each of the defendants, William Ferguson and Frederick Ferguson personally a true copy of the within summons.

GEO. A. STORRS, *Sheriff*,
By WM. K. HENERY, *Deputy*.

Fees, service	$3.00
Mileage	.80
Total	$3.80. Paid.

No. 123, Original. District court, fourth judicial district, Utah county. R. G. W. R'y Co. a corp. plaintiff, *vs.* W. W. Ferguson *et al.*, defendants. Alias summons. Thurman and Wedgwood, B. H. H. and Bradley, plaintiff's attorneys. Filed on return March 17th, 1897. Geo. Havercamp, clerk. By A. V. Robinson, deputy clerk. Received at sheriff's office March 16th, 1897, at 4 o'clock p. m. Geo. A. Storrs, sheriff, Utah county, Utah.

59 In the Fourth Judicial District Court in and for the *the* County of Utah, State of Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, a Corporation, Plaintiff, *vs.* W. W. FERGUSON, THE TELLURIDE TRANSMISSION COMPANY, L. L. Nunn, L. Holbrook, Sarah Ferguson, Frederick Ferguson, and William Ferguson, Defendants.	Demurrer.

The defendants Sarah Ferguson, Frederick Ferguson and William Ferguson, demurs to the complaint in this action upon the following ground:

That said complaint does not state facts sufficient to constitute a cause of action.

KING AND JOHN,
Attorneys for said Defendants.

Marked on back: Fourth district court in and for the county and State of Utah. Rio Grande Western Railway Co. *vs.* W. W. Ferguson, *et al.* Demurrer. Filed at Provo City, Utah, March 27, 1897. Geo. Havercamp, clerk. By A. V. Robison, deputy clerk.

60 Fourth District Court Minutes, Utah Co., Utah, March Term, 1897, Wednesday, the 7th Day of April, 1897.

RIO GRANDE WESTERN R'Y CO.
vs.
W. W. FERGUSON ET AL. } 123.

This cause came on regularly to be heard on defendants' demurrer *ot* plaintiff's complaint, after hearing the arguments of counsel and being fully advised, the court made order overruling the demurrer and gave defendants 10 days to file answer.

WARREN N. DUSENBERRY, *Judge.*

61 Fourth District Court, Utah County, State of Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, a Corporation, Plaintiff,
vs.
THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. Nunn, L. Holbrook, and Sarah Ferguson, William Ferguson, and Frederick Ferguson, Defendants. } Notice.

To the defendants Sarah Ferguson, William Ferguson, and Frederick Ferguson and to Messrs. King and John, their attorneys:

You and each of you will please take notice that on the 7th day of April, 1897, at the court-room of the first district court, Utah county, your demurrer to plaintiff's complaint in the above-entitled cause was by the Hon. Warren N. Dusenberry, judge of said court overruled, and you and each of you were given ten days in which to answer plaintiff's complaint.

BENNETT, HARKNESS, HOWAT AND BRADLEY AND
THURMAN AND WEDGWOOD,
Attorneys for Plaintiff.

No. 123. Fourth district court, Utah county, Utah. Rio Grande Western, R'y Co. a corporation, plaintiff, *vs.* The Telluride Power Transmission Co. *et al.* defendants. Notice. Received a copy April 9, 1897. King and John, attorneys for Frederick Ferguson, William Ferguson and Sarah Ferguson. Filed April 9th 1897. Geo. Havercamp, clerk. By, A. V. Robison, deputy. Bennett, Harkness, Howat and Bradley, and Thurman and Wedgwood, attorneys for plaintiff.

62 In the District Court of the Fourth Judicial District of the County and State of Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, a Corporation, Plaintiff, *vs.* W. W. FERGUSON, THE TELLURIDE POWER Transmission Company, L. L. Nunn, L. Holbrook, Sarah Ferguson, Frederick Ferguson, and William Ferguson, Defendants.	Answer of Sarah Ferguson, Frederick Ferguson, and William Ferguson.

Comes now the defendants, Sarah Ferguson, Frederick Ferguson and William Ferguson, and answering the complaint filed herein deny that the plaintiff is a corporation, organized under the laws of Utah and Colorado, or at all, on July, 9th, 1889, or at any time, or that its corporate name is the Rio Grande Western Railway Company; and upon information and belief den*ies* that by said alleged articles of agreement of incorporation or otherwise, it was organized or authorized or still is authorized to acquire or construct or maintain or operate various or any lines of railroad or telegraph in Colorado or Utah, or a line from Grand Junction to Ogden, Utah, or that it has acquired or constructed or operated said or any line; and not having sufficient information to answer the third paragraph of plaintiff's complaint *on* defendants — that ground deny that plaintiff is authorized to construct or operate a line from Provo, Utah, to the eastern boundary of Utah, or through the counties of Uintah, Wasatch or Utah, or a line from Provo to a point at or near the line of Duchesne fork of the Uintah river in Wasatch county, or a line passing through the said counties of Uintah, Wasatch or Summit; or that the only feasible route for said or any railroad from Provo City and thence northeasterly and easterly by said alleged route or otherwise is to go northeasterly up or in the direction of Provo river to the mouth of Provo canyon, or thence up said river or canyon to the summit of the Wasatch range of mountains, or that from the mouth of Provo canyon up said canyon and river the line of railroad of either of said alleged routes must be in or up said canyon, or that the lines for that distance are identical; but upon the contrary defendants allege that there are other and more practicable routes for the railroad, than that described in said complaint.

And upon information and belief deny that in the year 1889, or any time plaintiff filed with the Secretary of the Interior, a copy of its articles of incorporation, or due or any proof of its organization; or that the same is organized; and den*ies* that on or about the 1st day of March, 1896, or at all it commenced a survey of location of a line of railroad from a connection with its main line in Provo, Utah, to the mouth of Provo canyon and thence up the said canyon, or that it commenced the survey of any line or railroad or that it prosecuted said alleged survey of location with diligence or at all or completed the same from Provo for a distance of forty or any number of miles or that said survey or location is as described in said complaint; or is upon surveyed or unsurveyed land of the

United States, but defendant admits that some time during the summer or fall of 1896, certain persons claiming to represent plaintiff ran an irregular, uncertain and indefinite line of survey up said Provo canyon, but from the character of said lines as indicated by
63 stakes and otherwise, defendants believe and therefore allege that the same is not a line for a railroad route, and that it would be impracticable to construct a road according thereto.

And upon information and belief defendants deny that the plaintiff has made a map of said alleged survey or located line, or that the same has been adopted as the definite or any location thereof, or that plaintiff has commenced or is prosecuting the construction of its railroad or any railroad thereon.

But upon information and belief, deny that said lines of survey or location, as described in plaintiff's complaint, passes over a tract of unsurveyed land of the United States, but admits that a line run by said persons aforesaid does pass over certain unsurveyed lands of the United States in Provo canyon, and which when surveyed may approximately be parts of the section described in said complaint.

Defendants admit that they claim as heirs of W. W. Ferguson, deceased, and also by virtue of settlement on said land immediately made and continuous possession of the same held by them since his said death, and that for a long time prior thereto and for several years, said Frederick Ferguson and Elizabeth Ferguson were each an owner of a one-fourth interest in and to said claimed lands and premises so occupied and held by said W. W. Ferguson, and held the same in common with him, and continued so to do until his said death, a right to certain lands in Provo canyon, which are unsurveyed; but deny that said lands commence at a fence between said land so claimed the said lands below and southwesterly, or that said A. L. Murphy occupies any lands adjoining the land so claimed by said W. W. Ferguson, or any lands at all in Provo canyon; but upon the contrary defendants allege that said W. W. Ferguson in his lifetime was the owner of 160 acres of land, situated in Provo canyon, the exact boundaries and description of which these defendants cannot give, which said lands so claimed by him were and are upon unsurveyed land of the United States, and were so claimed and possessed by him long prior to the plaintiff's alleged survey. And deny that said alleged line of railroad is located over and upon said lands; and deny that plaintiffs have appropriated for railroad or any other purposes or at all, or for any right of way for its track or ground for a railway fixtures or appurtenances a strip of land 200 feet wide or any land whatever, or 100 feet wide on each side of the alleged line of survey, or proposed track, as stated in said complaint, or that the strip of land so alleged to have been appropriated by said plaintiff contains 22 acres or any number of acres, or that said alleged strip of land 100 feet wide on each side of said center line of survey, or any land whatever is necessary to plaintiff for the construction or operation of said alleged line of railway or any railway. Defendants admit that there is a map containing certain figures and lines attached to said complaint, but deny upon information and belief, that it is a map of any line or route of railroad or

location or survey, and deny that plaintiff is the owner of said or any land, or that said land is necessary for its use, or that defendants' ownership is subject to the payment of damages occasioned by the constructing or maintaining or operation of said alleged railroad, or that it is subject at all to any claim or pretended claim of said plaintiff; and denies that said plaintiff has appropriated any of said land.

Defendants further answering affirmatively allege; that they are the heirs and only heirs of the defendant herein named, W. W. Ferguson, and that said W. W. Ferguson died on or about the 19th day of February, A. D. 1897.

63¼ That more than ten years ago said W. W. Ferguson settled upon certain vacant, unoccupied and unsurveyed lands of the United States, situated in Provo canyon, and lying upon both sides of Provo river, and then and there made lasting improvements upon said premises; that he constructed a house thereon and lived continuously upon said premises until the time of his death and that the same was his only home; that he fenced a portion of said premises took out the water from said river, grubbed and cleared the brush thereon and had raised agricultural crops thereon and greatly improved the same.

That said W. W. Ferguson in good faith entered on said premises with the view of obtaining title thereto as soon as said land should be entered, and from the date of his entry thereon until his death, in good faith resided upon, occupied, possessed and held the same and claimed the ownership and title thereof against all the world; except a one-fourth thereof, which was owned and claimed by Frederick Ferguson and Elizabeth Ferguson, except as to a certain alleged contract of sale, of which they have not sufficient information and belief to answer thereto, and that said W. W. Ferguson was at the time of entering upon said premises, a citizen of the United States, and so continued until his death. That said occupation and possession of said premises was as stated, in good faith, and for the purpose of obtaining title from the United States, and said possession was notorious, peaceable and exclusive except as to the interests of Frederick and Elizabeth Ferguson, from the time he so entered thereon until the time of his death, as defendants are informed and believe; and defendants further allege, that said property is valuable for agricultural purposes, and that the construction of a railroad over the same would render the same valueless and useless therefor, and that said land is not subject to the right of eminent *dominion*.

Further answering by way of cross-complaint and answer defendants allege that they are the owners, and in possession and entitled to the possession of 160 acres of land situated in the county and State of Utah, which said lands are unsurveyed. That these defendants are the heirs and the only heirs-at-law of W. W. Ferguson deceased, and the said W. W. Ferguson died on or about the 19th day of February A. D. 1897; and that immediately thereafter they took possession of made settlement upon and have continued so to and now do hold said premises subject only to the paramount title of the United States. That said W. W. Ferguson prior to his death had been in

possession of said land for many years, with said Frederick Ferguson and Elizabeth Ferguson, each of whom owned a one-fourth interest and had occupied the same for a home and had made lasting and valuable improvements thereon, that he was at the time of entering on said premises and continued to be so to the day of his death, a citizen of the United States, and also are Frederick Ferguson and Elizabeth Ferguson, and entered in upon said land in good faith for the purpose of acquiring title thereto as soon as said lands were surveyed, and that until the day of his death he exclusively occupied said premises from said entrance thereon, except as to said Frederick Ferguson and Elizabeth Ferguson, and used a portion of the same for agricultural purposes and redeamed them from sterility and barrenness, and used water thereon and made them valuable and productive. That certain persons claiming to be representatives and agents of the Rio Grande Western Railway Company, on or about the — day of August, 1896, with force and violence entered
63½ upon said premises and cut down and destroyed certain trees growing thereon, and threatened, and still threaten, to enter upon said premises and to cut down and destroy certain trees growing thereon and improvements there situated, in a forcible and violent manner.

Defendants allege that said act of trespass if continued may lead to breaches of the peace and constitute serious and irreparable loss, injury and damage to said defendants and to said premises.

Wherefore, defendants pray that plaintiff may take no-ting by its complaint; that said defendants Sarah Ferguson, Frederick Ferguson and William Ferguson be adjudged and decreed to be the owners of said premises, subject only to the paramount title of the United States; and that said plaintiff, its agents, employees and representatives be perpetually enjoined and restrained from entering upon said premises or in any manner interfering therewith.

Defendants pray for general relief and for cost herein expended.

KING AND JOHN,
Attorneys for Defendants.

64 STATE OF UTAH, } ss:
County of Utah, }

Frederick Ferguson being first duly sworn deposes and says:

That he is one of the defendants in the above-entitled action; that he has read the foregoing answer and cross-complaint and knows the contents thereof and that the same is true of his own knowledge except as to those matters therein stated on information and belief and as to those matters he believes them to be true.

FREDERICK FERGUSON.

Subscribed and sworn to before me this 29th day of March, A. D. 1897.

ELMER JOHN,
[SEAL.] *Notary Public.*

65 No. 123. Fourth district court of Utah. The Rio Grande Western Railway Company, a corporation, plaintiff, *vs.* W. W. Ferguson, The Telluride Power Transmission Company, L. L. Nunn L. Holbrook, Sarah Ferguson, Frederick Ferguson and William Ferguson, defendants. Filed at Provo City, Utah, April 19th, 1897. Geo. Havercamp, clerk. By A. V. Robison, deputy. Received a copy April 19, 1897. Bennett, Harkness, Howat and Bradley, and Thurman and Wedgwood, attorneys. King and John, attorneys Provo Utah.

66 In the District Court of the Fourth Judicial District of the County and State of Utah.

THE RIO GRANDE WESTERN RAILROAD CO., Plaintiff,
vs.
W. W. FERGUSON ET AL., Defendants.

It is hereby stipulated and agreed by and between the parties hereto that the plaintiff may have to and including June 10th 1897, in which to plead to the cross-complaint of the defendants, Sarah Ferguson, William Ferguson and Fred. Ferguson, filed herein. Dated May 13, 1897.

KING AND JOHN,
Attorneys for said Defendants.

67 Fourth district court, Utah county, Utah. The Rio Grande Western R'y Co. plaintiff, *vs.* W. W. Ferguson, *et al.*, defendants. Filed at Provo City, Utah May 13th, 1897. Geo. Havercamp, clerk. By A. V. Robison, deputy.

68 In the District Court of the Fourth Judicial District, State of Utah, in and for Utah County.

THE RIO GRANDE WESTERN RAILWAY COMPANY, a Corporation, Plaintiff,
vs.
W. W. FERGUSON, THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, L. HOLBROOK, SARAH FERGUSON, FREDERICK FERGUSON, AND WILLIAM FERGUSON, Defendants.

The plaintiff answering the cross-complaint of the defendants Sarah Ferguson, Frederick Ferguson and William Ferguson, on information and belief deny that said cross-complainants are the owners or in or entitled to the possession of the parcel of land described in the complaint as being a strip 200 feet in width appropriated by the plaintiff for a railroad and railroad purposes, or of any part of said land, or that either of said cross-complainants is the owner or in or entitled to the possession of said strip or any part thereof.

69 On information and belief the plaintiff alleges that the only right or interest of the said W. W. Ferguson deceased,

in or to said land was by virtue of an occupancy thereof as unsurveyed land of the United States, and by the sufferance of the United States, and that he had no heritable interest therein, and that said cross-complainants as heirs of said deceased acquired no right or title thereto or to the occupancy thereof; also that the said W. W. Ferguson in his lifetime sold his possessory right to parties who never occupied the land.

And as to the allegation that said cross-complainants, immediately after the death of said W. W. Ferguson took possession of, or made a settlement upon, or have since continued to hold said lands, the plaintiff has no information or belief sufficient to enable it to answer thereto, and on that ground denies the said allegations and each of them.

And on information and belief the plaintiff denies that the said cross-complainants Frederick *or* Elizabeth Ferguson *was*, prior to the death of said W. W. Ferguson, in possession with said W. W. Ferguson of any part of said land, or that either owned one-fourth or any part of said land.

70 And the plaintiff denies that it entered upon said lands or any part thereof with force or violence, or in any way or for any purpose other than to survey and construct a railroad as alleged in the complaint and as it lawfully might, and denies that it threatens to enter upon the premises, in a forcible or violent manner, or to do any damage thereon or make any change in the lands except such as are necessarily incident to the survey and construction of its railroad on the strip of land appropriated therefor; and denies that the alleged or any acts done or threatened by it may if continued, lead to breaches of the peace or constitute serious or irreparable loss, injury or damage to the defendants or any of them.

THURMAN AND WEDGWOOD.

BENNETT, H., H. & B.,
Attorneys for Plaintiff.

Dated May, 15th, 1897.

71 STATE OF UTAH, } ss:
Salt Lake County, }

William F. Colton being first duly sworn on his oath says: That he is the assistant secretary of the plaintiff corporation, and makes this verification for and in behalf of said corporation; that he has read and knows the contents of the foregoing answer to the cross-complaint of defendants Sarah Ferguson, Frederick Ferguson and William Ferguson, and that the same is true of his own knowledge except as to the matters therein stated on information and belief and as to those matters he believes it to be true.

WILLIAM F. COLTON.

Subscribed ans sworn to before me May 15, 1897.

W. M. BRADLEY,
Notary Public, Salt Lake County, Utah.

72 Fourth district court. The Rio Grande Western R'y Co. plaintiff, *vs.* W. W. Ferguson, *et al.* defendants. Answer to cross-complaint of Sarah Ferguson, Frederick & William Ferguson. Received copy May 15th, 1897. King and John, attorneys for said defendants. Filed in Provo City, Utah, May 18th, 1897. (Seal) Geo. Havercamp, clerk.

73 Fourth District Court Minutes, Utah Co., Utah, March Term, 1897, Wednesday, the 7th Day of April, 1897.

RIO GRANDE WESTERN R'Y CO.
—
W. W. FERGUSON ET AL. } # 123.

This cause coming on regularly to be heard on defendants' demurrer to plaintiff's complaint, after hearing the arguments of counsel and being fully advised, the court made order overruling the demurrer and gave the defendants 10 days to file answer.

WARREN N. DUSENBERRY, *Judge.*

Fourth District Court Minutes, Utah Co., Utah, April Term, 1898, Monday, the 18th Day of April, 1898.

R. G. W. R'Y CO.
—
W. W. FERGUSON ET AL. } # 123.

This cause coming on regularly for trial before the court *and* the following jury was called, examined, accepted and sworn to try the issue, Levi A. Colvin, George Burch, William H. Gardner, F. W. Newman, Thomas B. Heelis, Charles Crandall, Ira D. Tiffany, and Thomas Barnett, the plaintiff being represented by Bennett H. H. B. & R. and Thurman and Wedgwood, the defendants being represented by Brown and Henderson and Bailey, no evidence was heard, further hearing was continued till April 19th, 1898 at 9.30 o'clock a. m.

WARREN N. DUSENBERRY, *Judge.*

74 "*Note.*"

The trial of the cause of Rio Grande Western R'y Co. *vs.* W. W. Ferguson *et al.* was resumed from day to day until the 27th of April 1898, when a verdict was returned, the following is a copy of the minutes made in open court on April 27th, 1898.

GEO. HAVERCAMP, *Clerk,*
By A. V. ROBISON, *Deputy.*

Fourth District Court Minutes, Utah Co., Utah, April Term, 1898, Wednesday, the 27th Day of April, 1898.

R. G. W. R'y Co.
—
W. W. Ferguson et al. } # 123.

The — of this cause was resumed before the court and the eight jurors heretofore empanelled who set together and heard the instructions of the court and the argument of counsel and retired to their room to consider their verdict. They subsequently returned into the court and returned the following verdict:

We the jury empanelled in the above-entitled cause find, We the jury have ascertained and hereby assess the value of the property right to the strip of land described in the complaint, and sought to be condemned and all the improvements thereon pertaining to the reality of the 14th day of September 1896, at $575.00.

We assess the damages which will accure to the possessory right to the portions of the land not sought to be condemned by reason of the severance of the part sought to be condemned from the remainder, and the construction of a railroad as proposed by the plaintiff at $500.00. We find the cost of good and sufficient fences along the line of said proposed rialroad and between it and other adjoining lands of the defendants is $525.30, and the cost of cattle-guards where fences may cross the line of said proposed railroad is $42.53, each.

75 April 27th, 1898, continued, 2.

We assess the benefits to the possessory right to that portion of the land not sought to be condemned but occupied with the part sought to be condemned of said proposed railroad at $ nothing

THOMAS BARRETT, *Foreman.*

Finding of the facts, conclusions of law of the court to be prepared, signed and filed and recorded, 90 days is given the defendants in which to prepare and settle bill of exceptions on motion for new trial.

WARREN N. DUSENBERRY, *Judge.*

76 Rio Grande R'y Company
vs.
L. L. Nunn et al.

Plaintiff's Requests.

77 Plaintiff's request No. 1.

1st. By this proceeding the plaintiff claims it has the right to an easement for a right of way for a railroad in and over the strip, of land described in the complaint, being two hundred feet wide on each side of the center line of a survey about 4,550 feet long and containing about $22\frac{9}{10}$ acres, upon paying the value of the possessory

right, and damages to the occupant if there be any occupant entitled thereto.

Given.

DUSENBERRY, *Judge.*

78 Plaintiff's request No. 2.

2nd. In this case it is for the court to determine the conditions precedent to condemnation, whether the plaintiff has shown a right thereto, and all conflicting or adverse claims to the property and to the compensation and damages arising out of the taking, this will be done by findings hereafter. You are to assess the compensation, and damages if any, to be paid.

Given.

DUSENBERRY, *Judge.*

79 Plaintiff's request No. 3.

3rd. You are instructed that the plaintiff has shown a right to acquire by condemnation the possessory right to the strip of land in question, and it is left to you to ascertain and assess the compensation and damages for the taking, and which would be just and accrued to one who was an actual occupant and entitled thereto; and the question as to which of the defendants is entitled to such compensation or damages will be otherwise determined.

Given.

DUSENBERRY, *Judge.*

80 Plaintiff's request No. 4.

4th. As a guide on the question of compensation and damages you are instructed that it is admitted that the tract of land of which the strip in question is a part was and is unsurveyed public lands of the United States. That the occupant of such land acquirres no title or estate in the lands by such occupation or possession. The right which he acquires is that, if he maintains his possession until after the lands are surveyed and subject to entry, he has, for a limited period of time a preference right to enter the same at the land office, and by compliance with the law acquired a title thereto. The compensation which you will give should therefore be with reference to the value of such a possessory right, and such a possessory right as existed on the 14th day of September, 1896, and prior to the death of W. W. Ferguson.

Given.

DUSENBERRY, *Judge.*

81 Plaintiff's request No. 5.

5th. You will therefore ascertain and assess:

First. The fair market value of the possessory right to the strip of land in question, and sought to be condemned, and all improvements thereon pertaining to the realty on the 14th day of September, 1896.

Second. The damages which will accure to the possessory right to the other portions of the tract of land, possessed with the strip sought to be condemned, by reason of the severance of the latter from the remaining portion and the construction of a railroad as proposed by the plaintiff.

Third. The cost of good and sufficient fences along the line of said proposed railroad, and between it and other adjioning lands as occupied on the 14th day of September, 1896, and the cost of cattle-guards where fences may cross the line of said proposed railroad.

Fourth. The benefits, if any, to the possessory right to that portion of the tract of land not sought ot be condemned, but possessed with the strip sought to be condemned, by the construction of said proposed railroad.

Given.

DUSENBERRY, *Judge.*

82 & 83 Plaintiff's request No. 6.

6th. In assessing value and damages, you are to consider the condition of the land and improvements pertaining to the realty, as they existed on the 14th day of September, 1896, and with reference to their fair market value for the uses to which they could be put as lands in their condition, and you are instructed that neither of the defendants L. L. Nunn or The Telluride Power Transmission Company has shown a right to flow the same, or to their use as a reservoir site, or to any increase of value or damages by reason of any right to flow or use the same as a reservoir sitel.

Given.

DUSENBERRY, *Judge.*

Plaintiff objects to 26 add to 25 and 27. But you are further instructed that under the issue submitted to you for your determination in this case you cannot in estimating the market value of the premises, or the damages to the possessory right of the defendants thereto, consider such value with reference to any right of the defendants, or either of them, to flow the same with water to any depth whatever.

84 7th. Now, gentlemen of the jury you are to determine the issues submitted to you from the testimony which has been given you in court. You are the sole judges of the facts, the credibility of the witnesses and the weight of the evidence. Six of your number may agree upon a verdict, that is to say, six of your number may find a verdict and assess the damages.

When you have retired to your jury-room, you will select one of your number as a foreman, and when you have agreed upon a verdict your foreman will sign it and return it into court, in case only six of your number should be able to agree upon a verdict, and your foreman is one of theos six, then all of the six jurors agreeing upon a verdict must sign it.

You will determine the amount of the damages from the preponderance of the evidence, by preponderance of the evidence is meant the greater weight of the evidence.

A form for your verdict will be handed you by the clerk.
Given.

DUSENBERRY, *Judge*.
WARREN N. DUSENBERRY, *Judge*.

85 *Request of Defendants for Instruction.*

I.

Refused Dusenberry judge. This action is brought under the statute of Utah, providing for and regulating the exercise of the right of eminent domain.

II.

Refused Dusenberry judge. The plaintiff can only maintain the action under this statute against parties who are the owners of the property in question.

III.

Refused Dusenberry judge. The right to condemn, or maintain an action under this statute, is based upon the idea that the defendants own the property and will not sell it for a necessary public use, and the gist of the action is to compel them to do so.

IV.

Refused Dusenberry judge. The plaintiff cannot maintain an action to condemn when it claims to own the title.

V.

Refused Dusenberry judge. The plaintiff cannot combine an action to quiet title with an action under this statute. 27 Pac. 256.

VI.

Refused Dusenberry judge If the complaint in this case alleges the ownership in the plaintiff, the action cannot be maintained, and your verdict should be for the defendant.

VII.

If the plaintiff is permitted to maintain this action, it is estopped from denying that defendants Nunn and The Telluride Power Transmission Company, are the owners of the premises described in the complaint, the other defendants having disclaimed. The allegation "that the defendants are the only persons and parties in possession of said land, or any part thereof, or claiming any right or title therein or thereto," is an allegation that they are the owners, and plaintiff cannot be heard to deny its own allegations.

Refused Dusenberry judge.

VIII.

Refused Dusenberry judge.

The use to which it is alleged the defendants propose to put said land, namely, "to flow the same for power purposes," is a lawful public use under the statutes of Utah.

IX.

Refused Dusenberry judge.

The purchase of the interest of Ferguson, an occupant of unsurveyed land, must be construed as a relinquishment of all claims to the land and all damages thereto occasioned by flowing the same for power purposes.

86

X.

So far as this case is concerned, the right to appropriate water begins when actual work begins, which is intended and calculated to effect an application of the water to some beneficial use, and the right continues as long as the work is prosecuted with diligence. While the work is being so prosecuted, the extent of the right is the same as the extent of the claim made by the appropriation within reasonable limits. The appropriation should be completed within a reasonable time; and when it is so completed the right relates back to the beginning of the work and is limited by the extent of the appropriation. What are diligence, a reasonable time, and reasonable limits, are questions of fact for the jury under all of the circumstances of the case.

Refused Dusenberry judge.

XI.

If defendant Nunn at any time prior to March 24th, 1896, determined to appropriate the waters of Provo river for power purposes, and to build a dam for the purpose of obtaining such power, and commenced work in the Provo canyon, and such work plainly indicated such purpose on his part, and was calculated to carry out such purpose, and he was at all times up to the commencement of this suit prosecuting said work with diligence, and such dam and the power to be generated thereby were reasonable in their extent and purpose, and the erection of such a dam would flow the land described, and the plaintiff had knowledge of this fact on March 24th, 1896, and said plaintiff had not before that date commenced to survey its proposed line of road running over said land, then your verdict should be for the defendant.

Refused Dusenberry judge.

XII.

If defendant Nunn, had before March 24th, 1896, formed the purpose in good faith to build a dam in Provo river at or near Hanging rock to a height of 25 ft., thereby raising the water to

Refused Dusenberry judge.

that extent and overflowing the land described, and had after such determination commenced actual operation on the ground, fairly and reasonably indicated such purpose, and continued the same with diligence to the commencement of this suit, and the plaintiff before it commenced its work knew of such purpose, then and in that case your verdict must be for the defendant.

XIII.

Refused Dusenberry judge.

If, under the rule before stated, defendant Nunn, acquired the right to flood the strip of land described for power purposes, and said right was prior in point of time to the right of plaintiff, and if the plaintiff could build its line of road on a grade carrying it above the obstruction in the river and the land overflowed thereby, then and in that case plaintiff is not entitled to condemn the land in controversy.

XIV.

87

Refused Dusenberry judge.

In order to estop defendants from ascertaining as against plaintiff the right to flow the premises in question, it must appear that defendants represented to the plaintiff by word or act that they made no such claim, and that plaintiff has acted upon such representation.

XV.

Refused Dusenberry judge.

The jury are instructed that in consider*ati*ng the question of necessity and the right to use and appropriate the unappropriated forces and opportunities provided by the water-courses and passes through the mountains and in the c*ñ*ayons of this State regard must be had to the necessities of the various enterprises and the rights of other industries having occasion to use the same; and if a first appropriator has confined himself within those limits a person or party seeking to avail himself of a second right of appropriation must if possible, exercise his right without destroying or impairing the rights of the first appropriator.

XVI.

Refused Dusenberry judge.

The question as to which party made the first appropriation of the land described, is a question of fact for the jury.

XVII.

Refused Dusenberry judge.

The question of necessity is a question of fact for the jury.

XVIII.

Refused Dusenberry judge.

The evidence in this case shows conclusively that the line of railroad adopted and approved by plaintiff prior to the commencement of this suit, does not include any part of the land in controversy, and there is no evidence tending to show that the plaintiff had adopted or approved a definite line of location over the land described, and therefore your verdict should be for the defendant.

XIX.

Refused Dusenberry judge.

Before a railroad company can acquire any rights under the act of Congress of 1875, as against one in possession of the land in question, it must show a strict compliance with all the terms of the act.

XX.

Refused Dusenberry judge.

If the jury finds that plaintiff did not begin the construction of a line of railroad through Provo cañyon within ten years from the filing of its original articles of association, its right to build such line has ceased by operation of the law.

XXI.

Refused Dusenberry judge.

Under the undisputed evidence in this case, your verdict should be for the defendants.

XXII.

Refused Dusenberry judge.

If the jury reach the question of assessing the damages, I charge you that so far as defendants Holbrook and Ferguson, are concerned, no damages should be awarded as to them, they having disclaimed.

88

XXIII.

Refused Dusenberry, judge.

In assessing the damages of defendants Nunn and The Telluride Power Transmission Company, the jury should consider the right which defendants have to use said premises, and the use for which they intended to appropriate them, and should assess in their favor the value of that use to them.

XIV.

Refused Dusenberry, judge.

In assessing value upon condemnation proceedings, such damages should be given as will compensate the defendants for the value of the premises for the use to which they intended to put them, and for the loss of any right which they are precluded from exercising by reason of such condemnation.

XXV.

Refused Dusenberry, judge.

In determining the value of the premises and the amount to be assessed in favor of the defendants, the use *of* which defendants intended to apply the same, and to which said premises are adapted, should be the ba*ises* of the valuation; and if said premises are adapted to a particular use, and defendants acquired them for such use, the value placed upon them should not be limited to any other use.

XXVI.

Refused Dusenberry, judge.

An appropriation of water may change the point of diversion as well as the point of application whenever necessary, subject only to the limitation that such change does not injuriously affect the rights of others.

89 Defendants' request No. 27.

In estimating the damages the jury should estimate and assess the same by reference to the uses for which the property is suitable, having regard to the existing business or wants of the community, or such as may be reasonably expected in the near future.

Refused except as modified by No. 29.

DUSENBERRY, *Judge.*

Defendants' request No. 26.

. Where property has been acquired and improved for carrying on a special business, and such business in fact enhances the value of the site, this fact may be considered in estimating the damages, and the damages are not confined to the purpose to which the land is being devoted. The jury may consider any purpose for which the land is adapted, and which enters into and effects its market value.

Refused except as given in general charge.

DUSENBERRY, *Judge.*

90 Defendants' request No. 29.

Market value of property includes its value for any use to which it may be put. If by reason of its surroundings, or its natural advantages, or its artificial improvements, or its intrinsic character, it is peculiarly adapted to some particular use, all the circumstances which make up this adaptability may be taken into consideration in estimating the compensation.

Refused.

DUSENBERRY, *Judge.*

Marked on back: 123. Defendants' request, At Provo City, Utah. Filed. April 27, 1898. Geo. Havercamp, clerk. By A. V. Robison, deputy.

91 In the District Court of the Fourth Judicial District, County of Utah, State of Utah.

R. G. W. R'y Co., Plaintiff,
vs.
W. W. FERGUSON ET AL., Defendants. } Verdict.

We the jury empanelled in the above-entitled cause find; we the jury have ascertained and hereby assess the value of the property right to the strip of land described in the complaint, and sought to be condemned, and all improvements thereon pertaining to the realty on the 14th day of September, 1896 at $575.00.

We assess the damages which will accrue to the possessory right to the portions of the land not sought to be condemned, but occupied with the parcel sought to be condemned by reason of the severance of the part sought to be condemned from the remainder, and the construction of a railroad as proposed by the plaintiff at $500.00.

We find the cost of good and sufficient fences along the line of said proposed railroad and between it and other adjoining lands of the defendants is $525.30, and the cost of cattle-guards where fences may cross the line of said proposed railroad is $42.53, each.

We assess the benefits to the possessory right to that portion of the land not sought to be condemned, but occupied with the part sought to be condemned, by the construction of said proposed railroad as $ nothing.

Dated, April 27th, 1898.

THOMAS BARRATT, *Foreman.*

91½ Marked on back: No. 123. Verdict. Filed this 27th day of April, 4.15, p. m. 1898. Geo. Havercamp, clerk. By A. V. Robison, deputy clerk.

92 In the District Court of the Fourth Judicial District, State of Utah, County of Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. Nunn, Sarah Ferguson, Frederick Ferguson, William Ferguson, and L. Holbrook, Defendants. } Judgment.

This action having come on for hearing before the court, and a jury impaneled to assess compensation and damages, on the 18th day of April, 1898, and having been heard on that and the succeeding day, it is now found and determined that the plaintiff is a railroad corporation as alleged in the complaint and with a franchise to construct and operate lines of railway and telegraph as alleged, including a franchise to construct a line of railroad and telegraph on and over lands described in the complaint and sought to be condemned.

That the plaintiff filed a copy of its articles of incorporation and

due proof of its organization with the Secretary of the Interior and the same were duly approved by the Secretary on the 27th day of May 1890, under the act of Congress on March 3, 1875, granting the right of way to railroad companies.

That the lands sought to be condemned and the adjoining lands are unsurveyed public lands of the United States, and at the time of the beginning of the suit were occupied by William W. Ferguson, who has since died.

93 That the plaintiff on the 8th day of July 1896, completed the survey and location of its line of railroad on and over the lands sought to be condemned and hereinafter described.

That the said defendant L. Holbrook has disclaimed any interest in the lands.

That neither on, or before, or since the 8th day of July 1896, has the defendants The Telluride Power Transmission Company and L. L. Nunn, or either of them, had any possession of the lands sought to be condemned, or by appropriation or otherwise any right to raise the waters of Provo river so as to flow the same or any part thereof, or any right to the said lands or possession thereof as part of a reservoir site, and to raise the waters of said river so as to flow the same would be an unreasonable use of said waters and the public lands and easements in the canyon adjacent to said river.

And it is now adjudged by the court:

That the use to which the land sought to be acquired by plaintiff is to be applied is the construction and operation of a line of railroad and telegraph for which the lands are to be used for a right of way, that it is a public use authorized by law; and that the taking and condemnation thereof is necessary to such use. That said lands have not already been appropriated to any other public use.

That none of the defendants by pleadings or otherwise is seeking condemnation of said lands for a reservoir or other public use, and the lands cannot be used for both as a reservoir site as claimed and a railroad, and there is no common use either public or private to be adjusted.

That the plaintiff is entitled to condemnation as against
94 any adverse or conflicting claims to the property sought to be condemned, upon complying with the conditions herein.

And the jury having by its verdict ascertained and assessed the value of the property sought to be so condemned and all the improvements thereon pertaining to the realty and of the estate or interest therein of the defendants and William W. Ferguson in his lifetime at the sum of $575.00; and also ascertained and assessed the damages that will accrue to the portion of lands not sought to be condemned by reason of the severance thereof from the portion sought to be condemned and the construction of a railroad in the manner proposed by the plaintiff at the sum of $500.00; and also found that no benefit will accrue to the portion of the land not sought to be condemned by the construction of the railroad proposed by the plaintiff; also that the cost of good and sufficient fences along the line of such railroad between it and other adjoining lands of the defendants is the sum of $525.30, and that the cost of

a cattle-guard where a fence may cross the line of such railroad is the sum of $42.53.

The defendants have not shown which of them should receive the compensation and damages, except that the defendant L. Holbrook disclaims.

It is further adjudged that the plaintiff upon paying into court to the use of defendants other than Holbrook, or such of them as may be entitled thereto, within thirty days from the 27th day of April, 1898, the sum of $1,075.00, and also upon executing to the defendants, (other than said Holbrook) a bond in the sum of $1,200.00 with sureties determined and approved by the court or judge, conditioned that the plaintiff shall build proper fences within six months from the time the railroad is built over the land taken, is entitled to a final judgment condemning the property de-
95 scribed in the complaint for railroad uses.

a. And it is further ordered that upon the payment of said sum of $1,075.00 into court as aforesaid, the defendants or any of them claiming the same may apply to the court for the same and in case of disagreement have their respective rights thereto adjudged as between themselves.

The property to be condemned is described as follows:

A piece of land on the unsurveyed lands of the United States, situated in the county and State of Utah, and in the canyon of the Provo river in said county, and passing into or through tracts which when surveyed, will be proximately part of the southeast quarter of the southeast quarter of section 27; the west half of the southwest quarter of section 26; the northeast quarter of the southwest quarter of section 26; and the northwest quarter of the southeast quarter of section 26, township five (5), south of range three (3) east of the Salt Lake meridian, being a strip of land two hundred (200) feet wide, and one hundred (100) feet wide on each side of a center line of survey, and running in the canyon along the Provo river, a distance of about 4,550 feet in length and containing about $20\frac{5}{10}$ acres; and staked and marked on the ground, begin-ing at the southwesterly end of the strip at a station of survey on the center line marked 643+40 (and proximately $12\frac{3}{10}$ miles from the city of Provo) and where the center line intersects the southwest boundary of land recently occupied by W. W. Ferguson, on the southerly side of Provo river, said point being 715 feet more or less north and 200 feet more or less west from the point where it is computed the southeast corner of said section 27 will be located when said township shall be subdivided by the Government survey, thence running northeasterly up the Provo canyon and river 4,550 feet more or less to a point 1,600 feet more or less northeasterly from the confluence of the South fork of Provo river with the Provo river, a map of said land being annexed to the complaint herein.

It is further adjudged that the defendant L. Holbrook has no interest in the subject of the action and as to him the action is dismissed.

By the court.

WARREN N. DUSENBERRY, *Judge.*

Dated April 27th 1898.

96 No. 123. R. G. W. R'y Co. *vs.* W. W. Ferguson *et al.* Judgment. At Provo City, Utah. Filed May 2, 1898. Geo. Havercamp, clerk. By A. V. Robison, deputy. Record—A—page, 397.

97 In the District Court of the Fourth Judicial District of the State of Utah, County of Utah.

RIO GRANDE WESTERN R'Y CO., a Corporation, Plaintiff, *vs.* W. W. FERGUSON ET AL., Defendants. } Judgment-roll Certificate.

I the undersigned, clerk of the district court of the fourth judicial district of the State of Utah, in and for Utah county, do hereby certify the foregoing to be a true copy of the judgment entered in the above-entitled action; and I further certify that the foregoing papers, hereto annexed, constitute the judgment-rool in said action.

[SEAL.] Witness my hand and the seal of said court, this 1st, day of May 1898.

GEO. HAVERCAMP, *Clerk.*

Marked on back: No. 123. Fourth judicial district court, State of Utah. Rio G. W. R'y Co., plaintiff, *vs.* W. W. Ferguson, *et al.*, defendants. Judgment-roll. Filed May 1st, 1898. Geo. Havercamp, clerk.

97½ Fourth District Court Minutes, Utah Co., Utah, April Term, 1898, Wednesday, the 4th Day of May, 1898.

R. G. W. R'Y CO. *vs.* W. W. FERGUSON ET AL. } 123.

In this cause, on motion of Henderson, attorney for defendants, the findings and judgment *is* hereby set aside pending a hearing, which is set for May 11th, 1898.

WARREN N. DUSENBERRY, *Judge.*

Fourth District Court Minutes, Utah Co., Utah, April Term, 1898, Friday, the 13th Day of May, 1898.

R. G. W. R'Y CO. *vs.* W. W. FERGUSON ET AL. } 123.

By request of counsel for defendants, the motion set for hearing on May 11th, 1898 is hereby postponed until May 16th, 1898.

WARREN N. DUSENBERRY, *Judge.*

97½ Fourth District Court Minutes, Utah Co., Utah, April Term, 1898. Monday, the 16th Day of May, 1898.

R. G. W. R'y Co.
—
W. W. Ferguson et al. } 123.

The judgment entered herein having been vacated to allow defendants to present findings, now on this day counsel for defendants presents findings and ask that they be allowed by the court, and the plaintiff, by counsel, ask- that the findings heretofore made and entered, stand as the findings of the court and that defendants' findings be refused, after hearing arguments of counsel the court took the matter under advisement.

In this cause, on motion of counsel for defendants, it is ordered that defendants have three months from this day in which to prepair and serve bill of exceptions, and final judgment, the time allowed by statute for that purpose, for good cause is extended accordingly. The court being advised now denies defendants' requests that defendants' findings be allowed and it is ordered that the former judgment and findings be reinstated this day.

WARREN N. DUSENBERRY, *Judge.*

98 In the District Court of the Fourth Judicial District, Utah County, State of Utah.

The Rio Grande Western Railroad Company, Plaintiff,
vs.
The Telluride Power Transmission Company, L. L. Nunn, *et al.*, Defendants.

The judgment herein, dated the 27th day of April, 1898 having been set aside to allow a request for further findings on the part of the defendants, and the motion for further findings having been heard and decided, the said judgment is now reinstated and made the decision and judgment of the court herein, this 16th day of May, 1898.

By the court.

WARREN N. DUSENBERRY, *Judge.*

Marked on back: In the 4th district court. The Rio Grande Western R'y Co. *vs.* L. L. Nunn, *et al.* Order No. 123. Filed May 16th 1898. Geo. Havercamp clerk.

99 STATE OF UTAH:

In the District Court of the Fourth Judicial District, County of Utah.

RIO GRANDE WESTERN RAILWAY CO., Plaintiff, *vs.* L. L. NUNN ET AL., Defendants. } Defendants' Requests for Findings.

The defendants again protesting against this court's finding the facts herein, and not waiving their objection to the court's assuming to find the facts and refusing to submit the question of fact to the jury, hereby request the court to make the following findings of fact, in case the facts are found by the court:

1. That in the year 1895 L. L. Nunn, who was and is a citizen of the United States, located a reservoir and dam site in Provo canyon at or near a point known as Hanging rock on the Provo river, and located and surveyed a flume or ditch line there from at a h-ight of 60 ft. above the water level at said point, and staked and marked the same plainly upon the ground, and claimed the right of way to convey the waters of said river along said line to a point near the mouth of said canyon and to utilize the same for the purpose of generating power and other beneficial uses; and the same time located and plainly marked upon the ground a site for a small ot te-porary dam and flume some distance below Hanging rock with which to aid in the construction of the upper or large dam and waterway, and that in the fall of 1895 he commenced the execution of said work with a large force of men.

2. That prior to the commencement of this suit he had expended on said work about $50,000, and $150,00 since then, and that said work has been prosecuted with diligence all that time.

100 3. That it was the intention of said Nunn to construct a plant capable of generating 10,000-horse power by means of said large dam and flume, and that it is possible to do so; that the cost of constructing same would be greatly lessened and the time of its completion has-ened by the use of power generated by said smaller or temporary plant.

4. That the proposed appropriation of the waters of said river is reasonable to the extent of 10,000-horse power, and that the work done by said Nunn is reasonably calculated to effect said appropriation.

5. That the land that would be covered by the proposed reservoir as located and surveyed by said Nunn, except 160 acres in which the strip of lans in controversy is included, was and is unoccupied and unsurveyed land of the United States.

6. That long prior to 1895 one W. W. Ferguson, who is named as a defendant, settled upon the said 160 acres, situated above Hanging rock on the Provo river, and was residing and living thereon during 1895.

7. That defendant Nunn, in pursuance of a verbal agreement made in the fall of 1895, entered into a written contract with said

Ferguson on April 24th 1896, for the purchas- of said 160 acres, who afterward in pursuance of said contract conveyed said lands to defendant Nunn by good and sufficient deed.

8. That on March 24th 1896, and for some time prior thereto defendant Nunn had said dam and reservoir sites, and the line of said flumes, plainly marked upon the ground, and his employees were in possession thereof prosecuting said work.

9. That plaintiff through its general manager had actual notice in the fall of 1895 that defendant was engaged in the construction of a power plant in said Provo canyon, and was intending to erect a dam which plaintiff admits was to be the height not exceeding 25 feet.

101 10. That on March 24, 1896, plaintiff with a force of one surveyor and three other employees began a survey of an alleged line of railroad up said Provo canyon and along said river. That about April 10, 1896, said surveyor reached a point near Hanging rock with an angle line; that he found employees of defendant Nunn there engaged in preparations for the building of said dam, and was informed by them that the water would be taken out near that point by means of a dam on a level 60 ft. above the river; that on or about May 13, 1896, said surveyor had reached a point with a final location line on the north side of said river, and was then informed by employees of defendant Nunn that the proposed dam would be 85 ft. high, and the site thereof was plainly marked upon the ground.

11. That a map of said surveyed line of railroad was filed in the local land office in June, 1896, and adopted on June 9th, 1896, by resolution of the board of directors of plaintiff. That said line as surveyed and adopted is on the north side of the river across said 160 acres.

12. That about July 1, 1896, a large portion of plaintiff's line was changed from the north to the south side of the river, a distance of 200 feet, or more, and that a plat of said line as changed was filed in the land office in December, 1896, after the commencement of this suit, and that said survey extends through the strip of land in controversy. That no part of the land in controversy is included within the strip of land 200 ft. wide along the line adopted by resolution of June 9, 1896.

13. That the line as surveyed through the premises in controversy had not been adopted by the plaintiff at the time of the commencement of this suit.

14. That the center line of railroad as surveyed by plaintiff runs along the bottom of said canyon, and at the place where defendant has erected his temporary plant and along the land in
102 controversy it would be when graded only about 14 ft. above the surface of the river.

15. That a part of the premises in controversy is flooded by the present temporary dam of the defendants, which is ten feet high; that a dam 25 ft. high at or near Hanging rock would flood the proposed grade of the entire center line through the premises in

controversy to a depth of from 10 to 12 ft. and the greater portion of said premises.

16. That the average grade of said line of railroad through said canyon is less than 1%, and the maximum grade established by plaintiff is 2%. That for a considerable distance above Hanging rock, which is about 1,200 ft. below the Ferguson land, the grade is about one-tenth of 1%, and for more than half a mile below said point it averages less than 1%.

17. That a line could be surveyed and a road built for very little if any additional expense, so as to overcome with a grade less than 2% a dam 25 ft. high at Hanging rock.

18. That on the trial of this cause defendants offered in open court to give to plaintiff a right of way through the entire reservoir site, including a right of way over said 160 acres, for a line of railroad which would permit the erection of a dam 25 ft. high at Hanging rock.

19. That a storage reservoir is essential to the enterprise of defendants to an extent of at least 25 ft., for the purpose of protection from ice and of regulating and equalizing the flow of water.

20. That there is no necessity for condemning a right of way for a railroad on the line as surveyed over the premises in controversy.

21. That there is no necessity for condemning a right of way for a railroad on a line which would not permit the erection and maintenance of a 25-ft. dam at Hanging rock.

103 22. A railroad can be built along the hillside above the bed of the stream through said canyon; a reservoir must occupy the bed of a stream.

23. The necessity of defendants' use of the premises in controversy for their purpose is greater than the necessity of plaintiff for its purpose. Both are quasi-public uses, and other things being equal, they stand upon an equal footing.

24. The occupation of the premises in controversy by defendant Nunn for a public use was prior to the survey of plaintiff's line *line* over the same.

25. The value of the premises in controversy, involving the privilege to flood them with a dam 25 ft. high at Hanging rock, is $100,000, and vastly more if the privilege of flooding them with an 85-ft. dam is involved.

26. The storage and appropriation of the waters of said river by means of a dam 25 ft. high at or near Hanging rock is a reasonable appropriation.

BROWN AND HENDERSON,
Attorneys for Defendants.

104 Marked on back: No. 123. District court, Utah county. Rio Grande Western R'y Co. *vs.* L. L. Nunn, *et al.* Defendants' requests for findings of fact. Filed May 16th, 1898. Geo. Havercamp, clerk.

105 In the District Court of the Fourth Judicial District, State of Utah, County of Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, Sarah Ferguson, Frederick Ferguson, William Ferguson, and L. L. Holbrook, Defendants.

Judgment having heretofore, and on the 16th day of May 1898, been entered in this cause, adjudging among other things that the plaintiff, The Rio Grande Western Railway Company, upon complying with the conditions specified therein was entitled to a further order or judgment condemning to its use for a right of way for a line of railroad and telegraph and for railroad uses, a certain parcel of land therein and hereafter described, and the plaintiff having deposited in court with the clerk thereof the sum of ten hundred and seventy-five ($1,075) dollars, under said judgment and for the use of the defendants as provided therein; and the said plaintiff having also executed to the defendants and filed in court a bond with sureties determined and approved by the judge of the court in the penal sum of twelve hundred dollars, conditioned as provided by law and that the said plaintiff shall build good sufficient and proper fences along the line of its railroad between such railroad and other adjoining lands of the defendants within six months from the time the railroad is built on or over the land hereby taken and condemned;

Now on the consideration thereof, and on motion of Thurman and Wedgwood and Bennett, Harkness, Howat and Bradley
106 & Richards, attorneys for the plaintiff, it is further ordered and adjudged:

That the said plaintiff has complied with and performed the conditions of the judgment entered as aforesaid and is entitled to the final order and judgment therein provided for.

And it is further ordered and adjudged that an easement in and to the lands hereinafter described, and in and to all the right title and interest therein or to the occupancy or possession thereof, of the defendants The Telluride Power Transmission Company, L. L. Nunn, Sarah Ferguson, Frederick Ferguson and William Ferguson or either or any of them, be and the same is hereby condemned and adjudged to the plaintiff The Rio Grande Western Railway Company, its successors and assigns for a right of way for a line of railroad and telegraph on and over said lands, and to the use of said plaintiff for said uses and purposes.

The land in and over which an easement as aforesaid is condemned is described as follows:

All that certain parcel of land, situated in the county of Utah, State of Utah, and being a strip two hundred (200) feet wide and one hundred (100) feet wide on each side of a center line of the survey thereof, on and over the unsurveyed lands of the United States which when surveyed will proximately be the west half of the southwest quarter, and the northeast quarter of the southwest quarter,

and the northwest quarter of the southwest quarter, and the northwest quarter of the southeast quarter of section twenty-six (26) and the southeast quarter of the southeast quarter of section twenty-seven (27), all in township five (5) south of range three (3) east of the Salt Lake meridian, the said strip being on the southerly side of the Provo river in the Provo canyon, and said center line of survey begin-ing at a point seven hundred and fifteen (715) feet more or less north and two hundred (200) feet more or less west from a point which is computed will be the southeast corner of said section twenty-seven (27), said point being marked station 643 + 40 in said center line, and thence running northeasterly along and on the south side of said river a distance of 4,550 feet more or less to a point 1,600 feet northeasterly from the confluence of the South fork of Provo river with said river, and to or near a point which it is estimated will be the northeast corner of the northwest quarter of the southeast quarter of said section twenty-six, containing twenty and nine-tenths acres more or less.

107 And it is further adjudged that no costs of this action or proceeding be allowed or taxed by either of the parties as against the other.

Dated May 21st, 1898.

By the court.

WARREN N. DUSENBERRY, *Judge.*

108 Marked on back: No. 123. District court fourth Judicial district, Utah county State of Utah. The R. G. W. R'y Company *vs.* The Telluride Power Transmission Company, L. L. Nunn, *et al.* Judgment of condemnation. At Provo City, Utah. Filed May 21st, 1898. Geo. Havercamp, clerk. Record "A" page 409. To be recorded.

109 STATE OF UTAH:

In the District Court of the Fourth Judicial District, County of Utah.

THE RIO GRANDE WESTERN RAILWAY, a Corporation, Plaintiff,
vs.
TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, SARAH Ferguson, Frederick Ferguson, William Ferguson, and L. Holbrook, Defendants.

You will take notice that the above-*named* defendants, The Telluride Power Transmission Company and L. L. Nunn, hereby appeal to the supreme court of the State of Utah from the judgment and decree herein made and entered in said district court on the 2nd day of May, 1898; and also from the judgment and decree herein made and entered in the said district court on the 16th day of May, 1898; and also from the judgment and decree made and entered in said district court on the 21st day of May, 1898. Said judgments and decrees above referred to being each in favor of the said plaintiff and against the defendants and they together consti-

tuting the final judgment and decree of condemnation in this cause in favor of the plaintiff and against the defendants.

This appeal is from the whole of each of the said judgments and decrees and from the whole of said final decree and judgment herein.

Dated: October 25th, 1898.

BROWN AND HENDERSON,
Attorneys for Defendants Telluride Power Transmission Co. & L. L. Nunn.

To the clerk of the said district court and to Messrs. Thurman & Wedgwood and Bennett, Harkness, Howat, Bradley & Richards, attorneys for plaintiff, and Sarah Ferguson, Frederick Ferguson, William Ferguson and L. Holbrook, three of the above-named defendants and to King and John their attorneys.

109½ Marked on back: No. 123. State of Utah, in the district court of the fourth judicial district, county of Utah. The Rio Grande Western Railway Company, a corporation, plaintiff, *vs.* The Telluride Power Transmission Company, *et al.* defendants. Notice of appeal. Service of a copy of *writen* notice admitted this 25th day of October, 1898. Thurman and Wedgwood, Bennett, Harkness, Howat & Bradley, attorneys for plaintiff. King and John, attorneys for defendants, Sarah Ferguson, Frederick Ferguson and William Ferguson, L. Holbrook. By Brown and Henderson, attorneys. Brown and Henderson, attorneys for defendants. At Provo City, Utah. Filed October 25th, 1898. Geo. Havercamp, clerk. A. V. Robison, deputy.

110–113 STATE OF UTAH:

In the District Court of the Fourth Judicial District, County of Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
THE TELLURIDE POWER TRANSMISSION CO., L. L. NUNN, SARAH FERGUSON, FREDERICK FERGUSON, WILLIAM FERGUSON, AND L. HOLBROOK, Defendants.

I, George Havercamp, clerk of the fourth judicial district court in and for the State of Utah, do hereby certify and return to the supreme court the original papers and files in this cause, consisting of all the pleadings, being the complaint, the answer of defendants, The Telluride Power Transmission Co. L. L. Nunn and L. Holbrook, answer of W. W. Ferguson, answer and cross-complaint of defendants Sarah Ferguson, *et al.*, answer of plaintiff to the cross-complaint of Sarah Ferguson *et al.*, instructions of the court, the petition to transfer the cause to the United States court and the order thereon denying the same, the suggestion of the death of W. W. Ferguson and its revival against his heirs-at-law, a copy of the minute entries in said cause and also the judgment and findings of fact therein and the notice of appeal.

And I further certify that a good and sufficient bond on appeal in due form has been properly filed.

That the said papers are the original papers in said cause, except as to minute entries upon the journal and as to those I certify that they are true and correct copies and that they are transmitted to the supreme court pursuant to the appeal herein.

In witness whereof I have hereunto set my hand and affixed the seal of said court this 12th day of December, 1898.

[SEAL.] GEO. HAVERCAMP, *Clerk.*

114–117 In the District Court of the Fourth Judicial District of the State of Utah, County of Utah, April Term, 1898.

Before Hon. Warren N. Dusenberry, judge.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
v.
W. W. FERGUSON ET AL., Defendants.

This cause was tried before the judge of said court and a jury from the 18th to the 26th days of April inclusive 1898.

Appearances.

For the plaintiff: Bennett, H. H. & B. by Judge Harkness. Thurman and Wedgwood.

For the defendants: Brown & Henderson and Bailey.

Stenographer's transcript of testimony and proceedings.

D. H. Roberts, official stenographer.

118 *Proceedings.*

The COURT: Draw a jury in the case of the Rio Grande Western against Ferguson and others. The parties ready?

Mr. BROWN: Wait a minute, perhaps Judge Henderson would like to be present.

The COURT: Wait a minute. Call Judge Henderson:

(Eight jurors drawn and called into the box.)

The COURT: Swear the jury, Mr. Clerk.

Mr. HENDERSON: Just a minute if the court please, at this time, before swearing the jury, either *voir dire*, or in the case, we desire to enter a challenge to the panel, and I desire that the stenographer shall take it, if the court please. We challenge the panel of jurors for the reason that section 1306 of the Revised Statutes of 1898, was not complied with in the returning and summoning of the present panel; especially for the reason that the jury commissioners named in that section were not appointed, and did not make the return of jurors before the 15th day of December, 1897, for service during the year 1898, and because the list—because the commissioners were appointed after the first day of January, 1898, and because the jury, the entire jury, of which this panel is a part, was returned and made

up by the present commissioners after January 1st, 1898. And I offer upon this motion in evidence the appointment of the commissioners, I don't remember the date of it——

Mr. BROWN: About the 19th——

Mr. HENDERSON: About the 19th of January, 1898, and the return made by the commissioners after that time, and that no other appointment, and no other return has been made, and this is a part of that jury. (Looking over the papers.) The appointment was made and filed in this court on the 7th day of January, 1898.

The COURT: I thought it wasn't so late as the 19th.

Mr. HENDERSON: Yes, well, I was mistaken about that.

119 Mr. HARKNESS: What is that Judge?

Mr. HENDERSON: The seventh of January.

Mr. HARKNESS: This is the evidence you are offering?

Mr. HENDERSON: Yes, that is the appointment of the commissioners and the list was returned to this court on the 14th day of January, 1898.

The COURT: By the commissioners?

Mr. HENDERSON: By the commissioners. And now I offer to show, unless it is admitted, it is a fact that this is the only appointment, and that this is the only return that has been made.

Mr. THURMAN: We will admit that.

Mr. HENDERSON: I understand counsel to admit that fact, and that these gentlemen that are called into the box now are a part of the jurors returned at that time; is that admitted?

Mr. THURMAN: We except to the sufficiency of the challenge, that is, we deny that the challenge is good in law.

Mr. HENDERSON: I simply call the attention of the court to the——

The COURT (int.): Yes sir, the court has had the matter on some other cases. The court will not refuse to hear you, Judge, though.

Mr. HENDERSON: No, I don't care, only I wanted to have the stenographer's notes show——

The COURT: Yes, let the record show that the challenge is denied.

Mr. HENDERSON: And I want the record to show that I called the attention of the court to this section 1306 and to section 3141; and give us an exception.

(Jurors sworn on their *voir dire*, and a jury is selected, empannelled, accepted to try the case.)

The COURT: Swear the jury.

Mr. HENDERSON: Now, just a moment before swearing the jury, I would like to have the record show that at this time, after the panel had been filled, after they had been sworn and examined on their *voir dire*, and before they are sworn in the case,

120 that the same motion I made a short time ago before the challenge to the panel be repeated and ruled on at this time.

The COURT: Let the record so show.

Mr. HENDERSON: And give us an exception.

(Jury sworn to try the case, and statement of the case made by Mr. Wedgwood.)

Mr. HENDERSON: Now, for the purpose of making this motion, if you will just call a witness on the stand and have him sworn, I want to do that after he is sworn.

Mr. HARKNESS: Mr. Yard, you be sworn, please.

E. J. YARD, called and sworn for the plaintiff:

Mr. HENDERSON: Now, if the court please, a witness having been sworn in the case, we object to the receipt of any testimony in this case, upon the ground that this court has no jurisdiction. That the same—that the case has been removed to the United States court, and the Federal court, that is the circuit court of the United States for the eighth circuit district of Utah, has jurisdiction, and upon that objection I want to introduce in evidence the proceedings which were had in this court upon an application to remove the case to that court; and offer them in evidence, and it consists of the petition, and the oath, the bond, and any other record that is on file in this case.

Mr. HARKNESS: We have no objection, except that I want to supplement it by the records of an order in this court denying the motion here.

The COURT: That was filed—it is a matter that was filed——

Mr. HARKNESS: At the beginning of the suit, yes.

The COURT: Yes.

Mr. HARKNESS: I want to put in the judgment and order
121 of this court denying the motion to remove it. In this connection I desire to introduce a certified copy of the order and opinion of the district court remanding it; they have taken a copy and filed in that court.

Mr. HENDERSON: Yes, that is right. We have no objection to that. The United States court, after it was denied in this court, took a copy of the record filing that in the United States court.

The COURT: And that court passed upon it?

Mr. HARKNESS: And Judge Marshall remands it, and gives his opinion, and I want to have that put in as an exhibit on this motion.

Mr. HENDERSON: Well, you don't put in the opinion, do you Judge?

Mr. HARKNESS: Well, the orders, the order and motion of said plaintiff to remand this case to the district court of the fourth district. Here is the decision. Now we attach to that the written opinion.

Mr. HENDERSON: Well, I don't know that we have any objection to it.

(Petition for removal marked "Def'ts' Ex. 1, D. H. R.")

Paper offered by Judge Harkness marked by reporter "Pl'ff's Ex. 1, D. H. R."

Mr. HARKNESS: Now, it is consented that I can withdraw this paper and substitute a copy for use in the files.

The COURT: The motion will be overruled.

Mr. HENDERSON: Give us an exception.

Adjournment taken until Tuesday, April 19th, 1898, at 9.30 a. m. with usual caution to jury. Tuesday, April 19th, resumed session Jury called. All present.

Copy of Pl'ff's Ex. 1, is this day substituted for the original,
122 and is marked "Pl'ff's Ex. 1, D. H. R." by reporter.

The COURT: Proceed, are you ready Judge Harkness?

Mr. HARKNESS: I believe so. We offer in evidence a certified copy of the articles of incorporation of the Rio Grande Western Railway Company, certified by the auditor of public accounts, and by the secretary of state of the State of Colorado.

Mr. HENDERSON: We object to it as immaterial.

The COURT: The secretary of Colorado?

Mr. HENDERSON: The State of Colorado, being a corporation in two States. I will state my objection a little more fully. We object to it as immaterial, and as not being duly authenticated. Of course as to that I have not examined it.

The COURT: Let it be admitted.

Mr. HENDERSON: Give us an exception.

Marked by reporter "Pl'ff's. Ex. 2, D. H. R."

Mr. HARKNESS: To show that at the time of this incorporation the laws of Colorado were the same as the laws of Utah upon this point, I desire to offer in evidence the laws of Colorado, the chapter, or the paragraph relating to railroads, which commences on page 205.

The COURT: 205?

Mr. HARKNESS: 205, and following, especially the sections with regard to consolidation, which are found on page 211, being sections 117, 118 and 119; yes, and 120. Those relating to consolidation are the same as ours except the agreement as to the directors instead of the officers.

Mr. HENDERSON: And we object to that as being incompetent and immaterial, and the further reason that there is nothing here to show that the law was complied with, except what was said in the paper itself.

Mr. HARKNESS: The articles themselves show

123 The COURT: Let it be admitted.

Mr. HENDERSON: Give us an exception.

The COURT: Subject to the effect of course of its organization of its compliance.

Mr. HARKNESS: Do you want to read this through?

Mr. HENDERSON: What is it?

Mr. HARKNESS: It is an exemplified copy of the Secretary of the Interior of the due proofs of the organization of the Rio Grande Western Railroad Company as approved and certified by him, the approval having been made May 24th, 1890.

Mr. HENDERSON: We object to that as incompetent and immaterial and also object that this is not properly authenticated; now I say that of course without knowledge. I haven't examined the papers; and we object to its being introduced until as a matter of fact they have shown and do show or give evidence tending to show that they did comply with the law.

The COURT: It is a question then as to the order of the introduction?

Mr. HARKNESS: Not at all, I think the compliance with the law is shown; in the first place the whole laws are here, the articles of incorporation are here, and proofs of organization are here, and it is certified, examined and approved.

The COURT: The objection is made by Judge Henderson to the effect of its authentication. Let it be admitted subject to that.

Mr. HENDERSON: Well, one moment, I would like to state the objection a little more fully in view of Judge Harkness' statements. Of course, I state again, as far as its authentication is concerned, I do that without special knowledge. I say that I object to this as incompetent and immaterial until they show here as a matter of fact that they have complied with the United States Statutes giving them or granting generally the right of way over the public domain in favor of railroads.

124 The COURT: Let it be admitted.

Mr. HENDERSON: Give us an exception.

Marked by reporter "Pl'ff's Ex. 3, D. H. R. Ferguson case."

Mr. HENDERSON: Just a moment; I would like to, in view of the fact that these are offered here, and we don't know what it is, I would like to reserve the right, and I would like to have the court grant the right to make further objections and exceptions to that.

The COURT: After examination?

Mr. HENDERSON: After examination.

The COURT: Very good.

E. J. YARD, recalled for plaintiff.

Examined by Judge HARKNESS:

Q. Mr. Yard, you were sworn last evening; where do you live, Mr. Yard?

A. Salt Lake.

Q. Are you connected with the Rio Grande Western railway in any way?

A. Yes sir.

Q. How?

A. Chief engineer.

Q. How long have you been connected with the road as engineer?

A. For fourteen years.

Q. Well——

A. As engineer, yes sir.

Q. Well you mean fourteen years on this road?

A. Yes sir.

Q. Not with this company?
A. This company wasn't organized only in '89.
Q. No?
A. No sir.
Q. Then with this company you have been connected ever since its organization in 1889?
A. In '89, yes sir.
Q. And for the road for the old company?
A. Since '83 or '84.
Q. '83; do you know what lines of railway the Rio Grande Western has operated since its organization?
A. It has operated the main line.

125 Mr. HENDERSON: Well, we object to that as immaterial, if the court please.
The COURT: Objection overruled.
Mr. HENDERSON: Give us an exception.

A. It has operated a main line from Ogden to Grand Junction, with several branches

Mr. HARKNESS:

Q. What is the length of the main line?
A. 328 miles.
Q. Does that main line run through the city of Provo?
A. Yes sir.
Q. Did it prior to 1896?
A. Yes sir.
Q. How long has it been since it went through the city of Provo?
A. Since '82, I think, or '83.
Q. That is the road?
A. Yes sir; since its organization.
Q. Do you know the Provo canyon?
A. Yes sir.
Q. I- constructing a line on the routes I read, you may state what would be the route, a line from the city of Provo, in Utah county, to a point on the eastern boundary line of Utah, where the same is crossed by the valley of the White river, passing into and through the counties of Wasatch, Utah and Uintah, connected at the connection with the Rio Grande in or near Provo City?
A. A line constructed on that route would start from the city of Provo, follow the Provo river, passing through Provo canyon, through Utah valley, and thence by way of Daniels creek, Strawberry creek, Duchesne river, and White river to the Utah boundary line.
Q. Another line of another description reading this wise: A line from a point at or near Provo, in Utah county, to a point at or near the mouth of the Duchesne fork of the Uintah river, in Wasatch county, passing into or through the counties of Utah, Wasatch and Summit, for the first twenty miles or more how would that line run?
A. It would be identical with the route first described.
126 Q. For the first twenty miles?

A. For the first twenty miles, yes sir.

Q. I refer in both cases to a connection with the main line somewhere at or near Provo City. Are you acquainted with this range of mountains on the east here, and the passes?

A. Yes sir.

Q. Is there any other pass that would meet that description except the one up the Provo river?

A. No sir I think not.

Q. Any other route for a railroad except that?

A. No practical route of which I know.

Mr. HENDERSON: I would like to enquire of counsel what the object of this testimony is; to what point; is it offered for the purpose of showing any right?

Mr. HARKNESS: If the court please, this is a peculiar case; we usually say this case is tried by the court and jury; this case is especially so. The court has to pass on some issues and the jury on some; as we understand it the court has to find whether this is a necessary right, or whether there is a necessity for taking the land for that purpose.

Mr. HENDERSON: Now, if the court please, if it is offered here for that purpose, I object to it; if it is offered for the purpose which I supposed it was offered for, of showing that this company by its articles of incorporation, by its agreements on its own part, had been incorporated for the purpose, was authorized to engage in the building of a railroad up there, I should have no objection to it.

Mr. HARKNESS: Well, we do offer it; I supposed that was understood.

Mr. HENDERSON: But if it is offered here for the purpose of showing that because they agreed between themselves that that should be a part of their enterprise that thereby they obtained any right to go up this river, of course I object to it; I didn't suppose it was offered for that purpose; and in reply to the suggestion that
127 counsel makes about this being a peculiar case; it is peculiar, and we can't tell until we get through how peculiar it will be; but I can't see why the rules of evidence should not be followed in this case any more than any other.

The COURT: Read the question.

Mr. HENDERSON: I understand that counsel offers it for the purpose of showing that it was within the contemplation of the enterprise, and for that reason we have no objection.

The COURT: Answer that question.

Question and answer read.

Mr. HARKNESS:

Q. You may describe to the jury the first twenty miles of that road, what kind of country it passes through?

A. Starting from Provo the first six miles follows the Utah valley, upon the river bottom, to the mouth of Provo canyon; thence for some twelve miles it follows through the canyon of the Provo river, which is a narrow rocky canyon; and then for several miles

it passes through an open valley, known as Utah valley—or Provo valley.

Q. In the first six miles then there would be some latitude of keeping—some choice?

A. Yes sir, up to that point.

Q. The first twelve miles you refer to, describe a little more particularly about the width, the average width of the valley, whether the river runs through it or not, and now the hills rise on each side.

A. The twelve miles referred to is in a narrow canyon, the width from side to side is, probably varies from 150 feet to 3 or 400 feet possibly, at places the sides of the canyon are rather abrupt, and will necessitate at a good many places heavy grading.

Q. Well you mean if you went up on to the sides?

A. Went up on to it.

Q. How high do the mountains rise there above the river bed?

A. Several hundred feet.

128 Q. In that twelve miles is the practicable route in the river bed?

A. The only practicable route is in—follows the grade of the stream.

Mr. HENDERSON: Just a moment. I object to that as leading.

The COURT: It has the semblance of leading. Let the witness describe it.

Mr. HARKNESS: For that twelve miles where would be the practicable route, or the only practicable route for a railway?

A. In my opinion it is in the bed of the creek, following the course of the stream closely.

Q. You have spoken of the Provo river; about what is the width of that river on the average in that twelve miles?

A. Oh, possibly a hundred feet, from fifty to a hundred feet.

Q. Does it run straight, or otherwise; what is its course?

A. It is in places; it is straight, but a good many places it is crooked, tortuous.

Q. How does it run with reference to being in the center of the canyon, or in the center of the bed, of the low ground, or curving from side to side?

A. It curves from side to side, in places, and other places it follows the center of the stream; the center of the canyon.

Q. Did you make or cause to be made any survey for a railway up that canyon?

A. Yes sir.

Q. When?

A. The surveys were made in 1896.

Q. What time of the year?

A. They began in March of '96, and were completed I think in the latter part of the year, the latter part of '96.

Q. For the first twenty miles how long, and within what time were they made?

A. They were made, I think they were completed in May, or the

line was run through the canyon I think by some time in May.

129 Q. Do you know this tract of land that we call the Ferguson land?

A. Yes sir.

Q. Where is it situated?

A. Situated about midway in the canyon.

Q. Of this twelve miles you spoke of?

A. Of this twelve miles I spoke of, rather near this end.

Q. Then the first twenty miles, the survey of which was completed along some time in May would enter and go beyond that land easterly?

A. It would.

Q. I show you a blue print; what is that?

A. That is a, you might call it a photograph of a map.

Mr. HENDERSON: It is a blue print?

A. A blue print; a blue-print map.

Mr. HARKNESS:

Q. What does it show?

A. It shows a line of railway, shows a portion of Provo river with the wagon road, and buildings of W. W. Ferguson, a few others topographical features.

Q. Do you know the piece of land that is described in the complaint?

A. Yes sir.

Q. Does it show that; and how does it show it? If it does, how is that marked?

A. It is—the immediate field of Ferguson's is shown, is marked by fence line on this map.

Q. I am speaking of the railroad, the piece which was described in the complaint as sought for railway purposes; how was that marked there?

A. It is marked by the right-of-way line, which is one hundred feet on either side of the center line of railway; the colored strip of land.

Q. The width of that then that is marked in red is two hundred feet?

A. Is two hundred feet, yes sir.

Q. And you say one hundred feet on each side of the center line?

A. One hundred feet on each side of the center line, yes sir.

130 Q. What is the length of it?

A. It is about 3,000 feet—about 2,000—let me see—about 4,000 feet is the length shown here.

Q. About 4,000?

A. About 4,000, yes, sir.

Q. Just look at that again, perhaps the complaint is wrong, the complaint says about 4,800?

A. It goes from station 43 to station 90 which is about 4,500 feet; the exact plus of the end line is not given.

Q. I see you have what purports to be Government subdivisions on there, are those only protractions of what would be?

A. Yes sir, these are protracted subdivisions, as showing approximately where they would be located after the line.

Q. If surveyed?

A. If surveyed, yes, sir.

Q. That is not intended to show it as surveyed land?

A. No, the land wasn't surveyed at that time.

Q. Do you know where W. W. Ferguson lived at the time of that survey?

A. He lived at the building shown on this map, in the building.

Q. Let me see how that is shown?

A. The building, here.

Q. Yes; he lived where it is marked W. W. Ferguson's house, and there is also a barn marked there, two barns?

A. Yes, sir I think he had two barns.

Q. That is where he lived?

A. Yes sir.

Q. What is that on there? There is a line there where *this* buildings are, and following that up, what is that line?

A. That is on the road.

Q. That is the road line?

A. On the road line, yes sir; the county road.

Q. How many acres does that piece contain that is marked in red?

A. It would be through four forties; 160 acres.

Q. Four forties?

A. Four forties, yes sir.

Q. I ask how many acres would be in the strip included in the red lines?

A. Yes, it doesn't go through four 40's it goes into four 40's.

131 Q. How is that?

A. It goes over a portion of four 40's.

Q. Have you figured the acreage that would be in that line?

A. No sir, I haven't; it would be approximately ten acres, a trifle over ten acres.

Q. I have it twenty-two?

A. Oh, twenty acres, double, it is two hundred feet wide; it would be 20 acres, something over 20 acres.

Q. What kind of land is that?

A. It is rough canyon land, the greater portion of it.

Q. Is the course of the river marked there?

A. Yes sir.

Q. On which side of the river is the land included in the red lines?

A. It is on the southeast side for the greater portion of the distance.

Q. It is part of the way on both sides?

A. It is part of the way on both sides, yes sir.

Q. Is the river marked by anything there so it can be distinguished?

A. Yes sir.

Q. And its approximate width?
A. Its approximate width is about 75 or a 100 feet.
Q. Yes, that is marked Provo river?
A. Provo river.
Q. How was that land included in the red lines surveyed, in what way was it marked on the ground?
A. It was bounded by a fence on the southeastern——
Q. Well, I am speaking of the red, included in the red lines, what you surveyed for a railroad line?
A. This was marked by stakes set one hundred feet apart.
Q. Is that the usual way of marking?
A. It is the usual way of marking a railway survey, yes sir.
Q. And what improvements at the time of making the survey were on the land included in these lines?
A. Practically no improvements.
Q. No crops?
A. No sir; it doesn't touch the field at all.
132 Q. Any buildings?
—. No, sir, no buildings.
Q. Any fences?
A. We cross a fence, one fence.
Q. Where is that one fence?
A. It is entering the lands in question.
Q. What is it?
A. It is entering at the point of entering the lands of Ferguson.
Q. The end line?
A. The end line, yes sir.
Q. That is the only fence?
A. That is the only fence shown, no there is another fence at the South fork.
Q. Within the——
A. Within the lines.
Q. The railway survey?
A. Yes sir.
Q. What direction does that run, is it marked there?
A. Runs north and south.
Q. Do these fences run up on to the bluff of the hills?
A. Not on the southeast side; the lower fence does, yes sir the southwest fence.
Q. How far does it go before it strikes the bluff there?
A. It is about, well, the fence itself is about 700 feet long.
Mr. HENDERSON: One moment, if the court please, continuing this I would like permission to ask the witness a question or two as to what he is testifying from.
The COURT: Very good.

Mr. HENDERSON:

Q. On his *voir dire* really. I would like to inquire if you are stating this from the map?
A. Some questions, yes sir, largely.
Q. You did not make the survey?

A. I did not make it actually, no sir, in person.

Q. And as these questions are asked, as a general rule you refer to the map that you have before you to ascertain these things?

A. Largely, yes sir.

Mr. HENDERSON: I do not think, if the court please, that that is proper; it goes in here as testimony really, its appearance on its face would be, would appear in the record to be testimony of his own, in fact.

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The COURT: In other words it is not the best testimony.

Mr. HENDERSON: Yes, it is not the best testimony.

A. (Int.) I have been over the ground in question.

Mr. HENDERSON:

Q. Well I know; but you never took these measurements?

A. Not in person, no sir.

Argued to the court.

The COURT: I think it is objectionable on that ground.

Mr. HARKNESS:

Q. Mr. Yard, was this map made under your directions as chief engineer?

A. It was yes sir.

Q. That map made in your office?

A. It was.

Q. Was there any other large map made in your office of this twenty miles, of the first twenty miles of this road?

A. It was; there was a map, yes, sir, made.

Q. Have you that map?

A. Yes sir.

Q. You may get it.

(Witness gets the map referred to.)

Q. You speak of a second fence on the map, I don't see it, will you tell me where it is marked?

A. It is at the South fork; near the South fork.

Q. Where the South fork comes in, or near there?

A. It is a portion of the fence that follows the county road and then turns down into the river.

Q. Oh, I see, it is marked here?

A. These dotted lines, yes sir.

Q. Have you a map made in your office of the twenty miles?

A. Yes sir.

Q. Let me see it, when was this map first made?

A. It was made in June, I think of 1896.

Q. June of 1896; you may state whether after this was made, after the map made in June this was made, in '96, some changes were made in it as shown on the map?

A. Yes some small changes were made.

Q. This you say was the map which was made in June 1896?

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A. Yes sir.

Q. With some exceptions; now will you state the exceptions in which that doesn't show the survey in June, but a later change?

A. The main changes are through, are covered by—are included within some six or eight miles in the canyon, where the line was changed to secure a more practical location.

Q. How much change?

A. Lateral.

Q. Yes?

A. Not to exceed two or three feet lateral direction.

Q. After June was there any change made of the survey through the Ferguson lands?

A. Yes, sir, there was.

Q. How much change was made?

A. I think it was changed to the other side of the river.

Q. Well, it is now on both sides isn't it?

A. A small portion of it is on—the greater portion of it prior to June was on the northwest side of the river, it is now——

Q. (Int.) Can you tell either from that map or from this how much the change was?

A. In a lateral direction.

Q. Yes?

A. I can't tell from the map, because neither show the——

Q. (Int.) Both of these maps show the change made after June '96?

A. Yes sir; my recollection is *that is* that it was not to exceed 300 feet.

Q. Neither of these maps show then the exact condition at the time of the first survey?

A. No sir.

Q. Now through this Ferguson land, I wish you would explain to the court and jury as quickly as you can, how much that change was after June?

A. Through that land?

Q. Yes.

135 Mr. HENDERSON: Judge, was this made June 9th did he say?

Mr. HARKNESS: It was on June 9th surveyed with the changes of the nature that he says, this showing all the changes.

Mr. HENDERSON: Well, this shows it as it was before the change?

Mr. HARKNESS: No, it doesn't. I will have a map down tonight; I thought it was here. I will explain to the court that I thought we had a map showing the survey before and after the change. Mr. Yard supposed the maps were all rolled up. I will have a map here tonight.

The COURT: This map is a map showing after the change?

Mr. HARKNESS: After the change and before the suit, and that also shows after the change.

Mr. HENDERSON: What is the date?

Mr. HARKNESS: The date wasn't changed. This was verified in December, and the surveys made under it on the 9th of June. The date of approval is given.

Mr. HENDERSON: Yes, but the surveys were made ending on the 9th of June?

Mr. HARKNESS: Yes.

Q. Now if you will describe to the court and jury how much that differs from the original survey which was completed in May, as you say the first one—I think it was in May?

A. Yes, sir; early in the summer.

Q. Well the original survey was in the same canyon?

A. In the same canyon, and only small changes were made, as is usual in a country of that character.

Mr. HENDERSON: If the court please, I ask to strike out that answer as immaterial. I do not see what difference it makes what is usual in countries of this or any other kind.

The COURT: The fact of what they did there; but the reasons for it I do not think is material; let it go out.

Mr. HARKNESS: Strike out the words "as usual."

136 Q. You did make small changes, now what were they, as definitely as you can name them?

A. There were changes to reduce, or cut out curves where it was found practicable to do so; also to locate the line on a more desirable, in a more desirable place where the work would be cheaper.

Q. As first surveyed, in May, the main part of the line was on the northwest side of the river, through this land?

A. Through this land it was, yes sir.

Q. Now the main part of it is on the south side?

A. On the south side.

Q. What kind of land is on the south side?

A. It is rough, wild canyon land.

Q. What kind of land is on the north side?

A. There is a field, lucern- field on the portion of the line.

Q. Then in addition to improving your line, you got out of the cultivated fields?

A. Got out of the cultivated fields yes sir.

Q. Then, previous to June 9th, 1896, had you made any other map than this, with the exception of the slight changes made since?

A. Yes, sir; there was another map made.

Q. Well, I mean was the map, was it the map of this same line?

A. It was a map of this same line, yes sir; in June.

Mr. HENDERSON: I think I will ask to have that stricken out until the map is here.

The COURT: The witness can be recalled. I understand you have the entire map, the original map.

Mr. HARKNESS: It is the same as this with the exception of a few changes.

Mr. HENDERSON: Yes, all right, he can recall the witness and put it in, but I would rather have the map here before the witness testifies in this way. He testifies it is the same line. The map will show.

137 The COURT: Yes, better get the map.

Mr. HARKNESS: I can't get it here until night, you see. I supposed it was here.

Q. One question, Mr. Yard, you may state whether this map of the line through the Ferguson tract connects with the line at both ends, the other part of the line?

A. Yes, sir; it does.

Q. As shown here?

A. Yes sir, did the first line you mean?

Mr. HENDERSON: That is the map shows it?

A. Oh yes, sir.

Mr. HARKNESS:

Q. As the map shows it?

A. Oh, yes, sir; it connects with the line as shown on the map.

That is all for the present.

Cross-examination by Judge HENDERSON:

Q. Mr. Yard, you are the chief engineer, I understand?

A. Yes sir.

Q. And you have general charge and supervision of the engineering work?

A. Yes sir.

Q. You have assistants?

A. Yes sir.

Q. And I suppose that your assistants, as a rule, do the field-work?

A. They do, yes sir.

Q. And you become acquainted in a general way with the general topography of the country in which you are working and operating, but the detail work is left to assistants is it not?

A. Largely, yes sir.

Q. That was so in this case?

A. It was so, yes, sir.

Q. They made these surveys and these measurements?

A. Yes sir.

Q. Now, you say there was some changes made; about when were they made, did you say?

A. Changes?

Q. Changes of the line?

A. The changes of the line were made all during the summer of 1896.

138 Q. Well, they were made after June 9th?

A. I think so, yes sir.

Q. Well, I see the date is, your date of your original survey was June the 9th, and these changes were made after that?

Mr. HARKNESS: No June 3rd.

Mr. HENDERSON: It is stated here June 9th.

Mr. HARKNESS: No, that is another date.

Mr. HENDERSON: Well, it was after June 3rd, anyway.

A. At what point of the survey do you refer?

Q. Well, the point along through the Ferguson land, for instance?

A. I do not, I cannot recollect the exact date that the survey was at that land.

Q. Isn't it true, Mr. Yard, that that was changed over there the first of July?

A. The first days of July at Ferguson's land?

Q. Yes?

A. It may have been, yes sir.

Q. Yes, may have been as late as that; well, that is your recollection, isn't it?

A. Yes, I think it was, yes sir.

Q. Yes, was that—now, I notice on this blue print, as you stated before, you know nothing about the actual measurement upon this ground except as it coincides with your general recollection, and the fact that you see it here on the map?

A. Yes sir.

Q. What does this red line represent?

A. It represents the center line of the survey.

Q. The center line?

A. The center line of the survey.

Q. And what do these two purple lines represent?

A. It represents the line of the right of way one hundred feet on each side.

Q. It represents a line one hundred feet on each side of the track?

A. On each side of the center line.

139 Q. Of the center line?

A. Yes sir.

Q. And what is this winding line through here with this arrow?

A. That shows the river.

Q. The course of the Provo river?

A. Yes sir.

Q. Yes, that shows the course of the river?

A. Yes sir.

Q. And that arrow indicates the direction of the stream, the run of the stream?

A. Yes, sir that is downstream.

Q. That is downstream Where is the outside of the lines of the Ferguson land; where does that line enter it, and leave it?

A. He claims to own to this line, to this fence line, and as the line was surveyed, as near as we could locate, there was where he claimed to, to this upper line.

Q. Well, you mean now according to this map?

A. According to this map.

Q. I suppose that is all you can testify to, what you have said?

A. Yes sir.

Q. According to this map it enters, and ends with these purple lines?

A. With those purple lines yes sir.

Q. Showing the one-hundred-feet limit on each side?
A. Yes sir.
Q. And according to this map here, as it is made here, it shows that all the way the center line is on the southeast side of the river, except at this sharp bend of the river there for a little ways?
A. Yes sir.
Q. And how wide did you say the stream was along there?
A. I think it is from fifty to a hundred feet; fifty to seventy-five feet.
Q. Well, I am not speaking of the width of the surface of the water, but of the washed bottom of the stream.
A. I think it is not to exceed 300, possibly 400 feet.
Q. Yes, it would average from three to four hundred feet?
A. Yes sir.
140 Q. The washed bottom of the stream?
A. It might average that.
Q. Yes; of course your center line is laid on a level above the washed bottom of the stream?
A. Yes, sir, it is.
Q. Which side did you say there was some lucern-?
A. It was on the northwest side of the river, on the north side of the river.
Q. Oh, yes; it is on the side that the first line went.
A. Yes sir.
Q. Now, you say, you will have a map here, there has been a map made which shows the first?
A. Yes, sir.
Q. Yes, that will be here, and I will ask you about that when it comes. Now, I notice that on this map, you have got down here what I take to be section and quarter-section corners?
A. Yes sir.
Q. Are they the same as were laid down on the first map?
A. I don't know as they were shown on the first map.
Q. Well, from what did you get them.
A. The line is projected from the nearest surveyed section corners, the nearest surve-d section line.
Q. When, if you know was that, were those lines projected?
A. I think they were projected in the office from an office map.
Q. Well, when, not where?
A. When, I think in possibly in August.
Q. August, isn't it true, Mr. Yard, that when you commenced your operations up there of surveying, that one of the first things you did was to get approximately the sections.
A. No, the first thing we did was to locate the line?
Q. Well, the first thing?
A. Yes.
Q. And didn't you then proceed to find out approximately as near as you could the sections it would pass through?
A. No, I think not.
Q. Well, didn't you know anything about this, the projection of this until August?

141 A. Oh, yes, we knew that it was on unsurveyed land.

Q. Yes, and you had approximately calculated about where those sections would be, hadn't you?

A. The section connections where the land was subdivided were taken as the line was located from time to time.

Q. Just state that again, I didn't quite understand that Mr. Yard?

A. The connection to section corners were made, where the line, when the line was on unsurveyed land, where it passed through surveyed land, through land at the time that the railway line was run.

Q. Yes.

A. This particular part of the canyon being on unsurveyed land, there was no effort made to look for the corners.

Q. Yes, now if I understand, starting from Provo, you were running through surveyed lands?

A. Running through surveyed lands, yes sir, for the purpose of tieing and locating the lines.

Q. For identification?

A. Yes sir.

Q. And when you got beyond the surveyed lands you knew approximately then the section upon which you were?

A. We knew when we left them, from the record in the land office—the surveyor general's office, knew that we had passed from the township.

Q. Yes, I know, but didn't you know as a fact what township and range you were on?

A. We knew what township and range we were on, yes sir.

Q. And didn't you know approximately what sections?

A. No, I don't know as we did; we had no occasion to make any inquiry about it.

Q. Who was it that had charge of this field-work?

A. Mr. Baxter.

Q. He is here, is he?

A. Yes sir; he is here.

Q. And he had charge; do you know whether he worked in the field with them on this matter?

142 A. He worked with them yes sir.

Q. How often did you inspect this work yourself?

A. Only a few times, I think during the summer; some half a dozen times possibly during the summer.

Q. And that was done by simply driving up the canyon, I suppose and looking along?

A. Yes sir.

Q. The character of this canyon is that of a narrow canyon with high hills rising rather abruptly on each side?

A. Yes sir.

Q. So that by driving up the road along the bottom of the canyon you had a full view of the whole premises and situation?

A. I saw, it, yes sir.

Q. That was practically how much above the bed of the stream,

and I mean by that the bottom of the surface of the water, I will say, in ordinary conditions, how much is the center of that line along near the Ferguson land above that ?

A. From fifteen, possibly from ten to fifteen feet.

Q. From ten to fifteen feet ?

A. Yes sir.

Q. What is the average grade running up that canyon ?

A. Average grade ?

Q. Yes ?

A. Or the maximum grade ?

Q. Or the maximum ?

A. The maximum grade is two per cent.

Q. Two per cent. ?

A. Yes sir.

Q. And what is the minimum ?

A. The level ?

Q. Do you have level anywhere ?

A. Yes sir we have level grade.

Q. Have level grades in places in the canyon ?

A. At places in the canyon, yes sir.

Q. How far from this Ferguson land have you got level grade ?

A. I think it is possibly level on the Ferguson land ; it is very light grade across the Ferguson land.

Q. It is a very light grade across there ?

A. Yes sir.

Q. What is the—right up the side of the Ferguson land and for say half a mile above it, what is the character of that canyon ?

A. Both sides of the canyon ?

143 Q. I mean the side on which you are running ?

A. It is an abrupt slope ; abrupt hillside, rocky in places.

Q. Very well, is it a comparatively straight side ?

A. No, sir, it is not ; it is crooked.

Q. It is crooked ?

A. Crooked and tortuous in that direction.

Q. How near to the side where the hills begin to rise abruptly does the center of your line run ?

A. It is on the hillside.

Q. It is on the hillside ?

A. The greater portion of the distance.

Q. That is just what I wanted to find out.

A. Yes sir.

Q. And the truth is you find it convenient to run the center of your line, or the place, the plan is to lay your track a little waysup on the hillside ?

A. It is, yes, sir.

Q. You find it a safer place ?

A. If you don't get too far from the bottom of the canyon, yes sir.

Q. Well is it safer from washes ?

A. Yes sir it is safer.

Q. It is a firmer bed ?

A. It is safer; that is the main point.
Q. Yes it is a safer bed.
A. Safer location.
Q. So that you- line skirts, substantially, along on the hill?
A. Near the bottom.
Q. Yes sir.
A. Yes sir.
Q. Now, according to your recollection, tell me for how long a distance along the Ferguson land you have a substantially level grade?
A. I think it is practically level over the entire length of the Ferguson land.
Q. And does it strike a substantial level and distance before it gets to the Ferguson land?
A. Yes.
Q. Going from the bottom—going up the canyon, I am speaking of?
A. For a short distance, yes sir.
144 Q. For a short distance; well, just approximate if you please how far according to your recollection that distance is before you reach the line of the Ferguson land, going up the canyon as shown on this map, you strike a substantially level grade?
A. I think it is level grade from the point spoken of as Hanging rock, or as the dam, in going east.
Q. Going east.
A. Yes sir.
Q. And how far is that below the line of the Ferguson land?
A. It is but a short distance; I can't recall just now; possibly a quarter of a mile, I think, quarter or half a mile.
Q. Yes, won't you tell me, if you please, the number of feet, now I ask it approximately only, I don't care for you to stop and compute, from that point of Hanging rock up to the place, going up the canyon, to where you leave the Ferguson land, and where this track runs substantially level; I thought to save time, I thought you had something on there that indicates.
A. No, the dam is below here.
Q. Well, I know, but I don't know, you have said how many rods it was, I think, haven't you, or how many yards from the lower end of the Ferguson land down to the Hanging rock?
A. Oh, I said it was a quarter or a half a mile; really I don't recollect the distance; I can examine the notes and tell you exactly how far it is.
Q. All right, I will leave that until you do that if you will.
A. Yes sir.
Q. I would like to know the number of feet.
A. Yes sir.
Q. Now at the place where you leave the Ferguson land going up the stream is it still level there?
A. it isn't level, but it is a light grade.
Q. Well about what per cent. after you leave there?
A. Oh, it doesn't exceed possibly one per cent.

145 Q. Yes, and for how long?

A. Well it is light grade clear to the head of the canyon.

Q. Yes, from there on clear through to the head of the canyon?

A. Clear through to the head of the canyon.

Q. Now, I will call your attention to this point of Hanging rock, and where you have spoken of as the dam, from there down the canyon for a half a mile what is the grade?

A. It is rather a light grade.

Q. A light grade?

A. Yes.

Q. Well, for say a half a mile, about what percentage?

Mr. HARKNESS: I would like to call the court's attention that this cross-examination isn't in answer to anything on direct. That we haven't opened the case as to the dam or of this Hanging rock, or any of those places. I have no objection to counsel examining him.

Mr. HENDERSON: I am only using that by way of identification is all. I am not going into the matter of the dam at all. I only use that as a matter of identification.

The COURT: Proceed.

Mr. HENDERSON:

Q. Just state approximately according to your recollection, Mr. Yard, what the per cent. grade is for a half a mile down the canyon from the place you have mentioned to Hanging rock.

A. It is a light grade, and I should say does not exceed one per cent.

Q. Not to exceed one per cent.?

A. No, sir.

Q. For what distance down the canyon is that true?

A. About a half a mile I think.

Q. About a half a mile?

A. Yes sir.

Q. Further down it is sharper?

A. Yes sir, sharper.

Q. And it comes to about how much for the next half a mile?

A. It is two per cent. I think.

146 Q. Yes, two per cent. in there; now what is the character of the canyon during that, and covering that half a mile distance below this dam, or below this Hanging rock?

A. It is narrow; the character of the canyon?

Q. Yes.

A. It is a narrow canyon.

Q. And about how much of the bottom of the canyon does the washed bed of the stream cover?

A. At places I think it is not more than from a hundred to two hundred feet.

Q. Is it true that along that half a mile, that as you come down to the bottom of the canyon, that there is a bench or level after you leave the hills, coming down the side, coming out towards the creek,

leaving a small flat along each side of the washed bed of the creek, or does the hills come right up to the washed bed?

A. I think the hills come up to washed bed of the creek the greater portion of the distance.

Q. During that half a mile is the center line of your road a bench, the idea is to build your track; does that run along the foot of the hills, the same as it does above?

A. I think so, yes sir.

Q. The same idea is carried out down there, of running the road-bed itself, just a little ways up along the foot of the hills?

A. Yes sir; it is.

Q. Let's see, a half a mile would be how many feet?

—. 2,640 feet.

Q. 2,640 feet; it isn't to exceed a one per cent. grade there?

A. I think not.

Q. According to your recollection, and maybe less?

A. Maybe less.

Q. Your maximum grade on that road is two per cent.?

A. Two per cent., yes sir.

Q. A two per cent. grade would—suppose that was graded up two per cent. covering that half a mile, and you would commence at the same point down the stream, how much would that raise the
147 upper end of the line when you reach the Hanging rock?

A. Erratically 26 and $\frac{4}{10}$ feet.

Q. 26 and $\frac{4}{10}$ feet; so that you would pass the Hanging rock at a raise on what your line now is of 26 and $\frac{4}{10}$ feet?

A. Yes.

Q. I suppose it would have been practicable to have built a line that way, would it not?

A. It is possible; possible to build it.

Q. Well, possible; all there is that you would have done, you would have simply commenced at the same place down the canyon?

A. Yes.

Q. And it would have varied from it just one per cent.?

A. Yes.

Q. One foot in every one hundred feet?

A. Yes sir.

Q. It would have been raised above that until it got up there, and you would have found yourselves just 26 and some fraction feet higher?

A. Yes.

Q. And past that point there, and there you could have proceeded on the same grade that you did before?

A. Yes, sir; if you are considering the question of grade only, yes.

Q. Well, what other question suggests itself to you?

A. Well, it is a question of cost largely.

Q. Well, of cost; you have to prepare your road-bed on the side hill?

A. You are not far enough away from the bottom but what it af-

fords us an opportunity for the slope of the embankment to be sustained by the bed of the creek.

Q. All there is about it you would have to make the bed up there a little wider?

A. A little wider.

Q. Yes.

A. Oh, it is a question of building masonry walls, probably, to sustain it.

Q. Is there any place where you would have to build masonry walls to protect your line during that half a mile below the Hanging rock?

A. Below the Hanging rock.

148 Q. Yes?

A. There might and might not be; it is a question of survey.

Q. Yes, there might be a necessity beyond for building anything?

A. A tunnel for instance.

Q. Yes?

A. Yes sir.

Q. But I am speaking now of the fact?

A. Well.

Q. You have gone over that line time and again, and you are the chief engineer of this company?

A. Yes sir.

Q. You are having charge of its engineering propositions?

A. Oh, yes.

Q. And you have certainly examined that business up there; you expect to build a railroad there, don't you?

A. Yes sir.

Q. And you have looked at it with that view?

A. Yes, sir; I have looked at the most practicable way.

Q. Well haven't you considered anything but the one you finally located on?

A. Why I was confining my examination to the most practicable route that I can see.

Q. Isn't it true in laying a line of railroad alone the base of such hills as that, that you have to take into account not only what the footing of your wall is that keeps it from sliding out from under you, but haven't you got to examine what is above you to see what is liable to *to* come down onto you?

A. Certainly, yes sir.

Q. Yes, well then, you certainly have ta-en notice of that hill along there, the whole distance of that line?

A. Yes, sir; oh yes.

Q. Now, can you tell me that there is any reason to think that there is a place along there where you would have to build a foot wall of masonry, simply on account of having to go up higher on the hills.

A. I wouldn't swear to that, but I say——

Q. (Int.) It might be so?

A. It might be so, yes, sir.

Q. Yes, and it might be that by that building that line up there that you might in the actual demonstration of events, you
149 might save yourselves from some calamity that might otherwise come to you; that might be so?

A. Oh, yes.

Q. All that might be?

A. Might be, yes sir.

Q. Ig you are talking about possibilities?

A. And might be some better.

Q. Yes, and might be much better, and might be much worse; but if that was the scheme to lay that along there, it could be built there?

A. It is possible, yes sir.

Q. Yes, and that would carry you, as you say, 26 feet higher up when you got to the Hanging rock, and carry you over to the flat beyond, that is, on the hillside beyond?

A. Twenty-six feet above the flat.

Q. Yes, I know, 26 feet above, and there you would have the same proposition of running along the side hill, and simply higher up?

A. There is an exception there at the South fork.

Q. How is that?

A. There is an exception there at the South fork; we have a lateral valley coming into this; at South fork it would be some 30 or 40 feet up in the air.

Q. Well, just tell me where that South fork is?

A. This is the South fork coming in from the south to the Provo river. The bottom lands here are probably, oh, I should say not less than a thousand feet across from one side of the hill to the other. The bed of the South Fork stream is practically at the same level as the bed of the main Provo river.

Q. Yes, do you have the bridge across that?

A. Might have to bridge, yes, sir, if we were up in the air.

Q. Well, do you have to bridge across there?

A. Across the South fork?

Q. Yes.

A. Yes sir; a small bri-ge.

Q. A small bridge; and if you were running farther up
150 the hill it would of course be farther from one bank to the other.

A. Yes sir.

Q. And of that cut as it exists up on the hill there?

A. Yes.

Q. And here would have to be a fill and culvert there?

A. A fill and a bridge, yes.

Q. A bridge or a culvert, something to let the water through?

A. Yes.

Q. Whatever it would be; now calling your attention to the other side of the stream at South fork, on which side did your original survey run?

A. On the north side of the river.

Q. On the north side; you was over on the other side?

A. Yes sir.

Q. And on that side there was no lateral stream coming in?

A. No lateral stream at that point.

Q. I suppose the base there so far as the foot walls are concerned is about the same?

A. About the same, yes sir.

Q. You don't know of any particular difference; so that it should be constructed on the other side?

A. Oh, yes.

Q. In the same way if necessary?

A. Yes sir.

Q. And there nothing is to be encountered?

Q. Well, have wagon road to encounter on that side; the wagon road is on that side.

Q. But what I am speaking of now is, suppose you should commence at a point half a mile below Hanging rock?

A. Yes.

Q. On a one per cent. higher, steeper grade, up the canyon?

A. Yes sir.

Q. Varying a foot in each hundred feet?

A. Yes sir.

Q. The wagon road, the further you went up the hill, the farther you would be out of the way of the wagon road?

A. Yes sir.

Q. So that would tend to get rid of that difficulty rather than to make it worse?

A. All of our slopes would run down into the wagon road; the hillside was steep.

151 Q. Yes, it would run into the wagon road that is true, and that line as it was, it would run right close to the wagon road?

A. Yes, sir, in it at places.

Q. Just above it?

A. Yes sir.

Q. So that as your line was first run it was above that; this would simply make it a little higher up?

A. Yes sir.

Q. What in your opinion, if you have any opinion, or, by the way, I withdraw that; let me ask another question; in running up that canyon what is the problem that you have, what is the theory that you have tried to follow; have you tried to keep on that side of the canyon, nearest the stream, where there isn't a valley or a flat, and run along the stream a little up the hill, keeping on the side where the stream is nearest to the hills?

A. I don't know as that is—that is one consideration, yes.

Q. Yes, in other words, for instance, if in going up there you come to a part of the canyon where for a mile the stream has worn its channel pretty well up to the foot of the hills, you would rather run on that side?

A. Oh, no, no, we would prefer to run on the smoothest side; the

place where there is the greatest flat; where there is a more flat bottom there.

Q. Where there is a more flat bottom there?

A. Yes sir.

Q. Why so, if you run up the hills a little, what is the reason for that?

A. Well there is more opportunity for locating a straight line where you have an opportunity to make some lateral variations.

Q. Yes, but if you are running up the hill and it is steep, you have to keep pretty well along the line of the hills, don't you?

A. Yes.

Q. Yes, and that occasions more curves.

A. Requires more curves.

Q. Yes, that requires more curves?

A. Yes.

Q. Now tell me whether you have crossed the stream at times?

A. There?

Q. Yes?

A. In that place

152 Q. No, I mean the whole distance, you say it runs sometimes on one side of the stream and sometimes on the other; what is the theory upon which you adopt one side or the other of the canyon?

A. Why, we usually run a line on both sides and locate the best line; the line that is the straightest, and as you state there; the line on which there is—the side on which we can secure the best supporting ground, as it is called.

Q. And it is true, isn't it, in running a railroad through any difficult country for a road, that you run more than one line?

A. Yes, half a dozen.

Q. Yes, run half a dozen?

A. Yes.

Q. You run trial lines?

A. Trial lines, yes sir.

Q. For the purpose of ascertaining which is the best?

A. Exactly.

Q. And until you finally select one?

A. Yes, sir.

Q. And this line on this side was finally selected the first days of July?

A. I am not certain as to dates.

Q. Well, you stated about that, that was your——

A. (Int.) I think this survey——

Mr. HARKNESS: After the first of July?

Mr. HENDERSON: Yes after the first of July.

A. After the first of July, or may have been later.

Q. Had this line been surveyed before that time, or this line wasn't surveyed until then, was it, until after the first of July?

A. On that side of the river you mean?

Q. Yes?

A. I think not, possibly not.

Q. No, it wasn't surveyed, and you certainly didn't determine to make the change until after the survey had been made over on that side?

A. No sir.

Q. And until you had summed up the difference?

A. The differences, yes sir.

153 & 154 Q. Now isn't it true that it was along the middle of August when this change was finally determined upon?

A. It may have been.

Q. Well, was you here at the last trial?

A. Yes sir.

Q. You heard Mr. Baxter state about it at that time, didn't you?

A. Yes sir.

Q. Well, isn't it your remembrance that that was about the middle of August?

A. It may have been, I can't tell.

Q. Well, I know that may be true, of course you know, Mr. Yard, that that is always true, it may have been of course.

A. It may have been——

Q. (Int.) But what I am asking you for, give me your best recollection; isn't that your best recollection, that that is true?

A. I don't remember the point of the testimony at all.

Q. No, I didn't ask you that, but putting your mind back on the discussion, and stating as you did that it was according to your recollection after the first of July when this line on this side was surveyed——

A. Yes sir.

Q. And knowing as you do the custom and habit of running these trial lines and not determining and selecting until they have been run there, to see how that jibes with the other end of the line, and taken as a whole——

A. Yes sir.

Q. Isn't it your judgment and recollection now that it was along about the middle of August when that was finally done, that change was finally adopted and determined upon.

A. It may not be final now; we may make changes now.

Q. Yes, that may not be final now; that is, it may be that you never use a part of this hundred feet that you have got on this map?

A. The line may be changed from time to time at any place where we can see it may be improved.

Q. I don't quite see what you mean by that; you say it may be changed; do you mean by that that this company may de-

155 termine to make a change?

A. No sir, only a question of economy I mean in locating the line.

Q. Well, I say, on account of economy, and with the company, it may be that the company may change to some other line?

A. Along within the confines of that canyon?

Q. Well, of course, I mean there, in Utah county, or Summit county, whatever county it is in, and I am speaking of this line now, this hundred feet.

A. Yes.

Q. It may be that they may determine finally as they figure this out that they won't want to run it on this particular hundred feet?

A. I think that is the place we would prefer to have it, to the best of our knowledge at present.

Q. Yes, at present, but it may be changed hereafter?

A. It is possible.

Q. Possible; now what did you mean by what you said a few moments ago upon that subject, I would like to know, Mr. Yard. I didn't understand that; it may be changed yet you said?

A. Yes sir; the change in "H" street is an illustration of what I mean.

Q. What is it?

A. The change in H street is an illustration of what I mean.

Q. Well, of course; I don't know anything about that. I didn't know there was an "H" street until you spoke.

A. The line as originally set was constructed as you have there——

Q. What you mean that the line is constructed this way?

A. (Int.) And at the present time it seems to be the best line, to the best of my knowledge and belief.

Q. It may be that after all that you may change that line?

A. It may be.

Q. And run it up the mountain higher, on the hill.

A. May be, yes.

1553 Q. And even change it to some other place?

A. The other side of the canyon?

Q. The other side of the canyon, or something of that kind?

A. Possibly, yes sir.

Q. You haven't come to the point where it is unchangeably fixed where you will run the road then?

A. As I have said, to the best of my knowledge and belief that is the place.

Q. Yes, I know, according to the best of your knowledge and belief it is unalterably fixed?

A. Oh, nothing is, no.

Q. No, what do you think, that in your judgment would be the difference in cost of building that line one per cent. higher grade up, and commence a half a mile below Hanging rock?

A. It would take a survey to give an intelligent estimate of cost.

Q. It would take a survey to tell whether it would cost more or less, wouldn't it?

A. Yes sir, possibly.

Q. Yes, at the present time you couldn't undertake to say whether it would cost more or less, or how much?

A. It is my opinion it would cost considerably more.

Q. Your opinion would be that it would cost more?

A. Yes sir.

Q. Well now, if you have an opinion about it, you must have some opinion about how much in your judgment?

A. Oh, I would rather not give any amount, because I could hardly tell.

Q. It is hard to tell, isn't it?

A. Hard to tell.

Q. In fact, you are not prepared to say absolutely that it would cost more, are you?

A. Yes sir; I am prepared to swear that it would cost more in my opinion.

Q. In your opinion you think it would cost more?

A. Yes sir.

Q. But as to how much you wouldn't like to say?

A. No sir.

Q. Can you give me what the average grade is from the mouth of the canyon for twelve miles up?

A. I cannot from recollection, no sir.

156 Q. The average grade?

A. No sir.

Q. You have said——

A. (Int.) I have data I can give it to you exactly, if you have time to wait for me to secure the profile of it.

Q. You have a profile of it?

A. We have a profile of it and it would be easy to average it.

Q. It would be easy to tell how much to the mile, and apportion up the whole distance?

A. Yes, sir, very easy.

Q. You cannot now state what the difference in altitude is between the mouth of the canyon on your road-bed as laid and a point twelve miles up?

A. No sir, I cannot, from recollection.

Q. Mr. Yard, let me inquire, what is the—you have worked for other roads, have you not, besides this one?

A. Yes sir.

Q. Have you ever been chief engineer of any other road?

A. No sir.

Q. No, but you have been employed as engineer for other roads?

A. Yes sir.

Q. Probably in the position of assistant engineer?

A. Yes, sir.

Q. How long did you state your experience had covered, how many years?

A. In engineering?

Q. In engineering and railroad work.

A. Since '81.

Q. Since '81?

A. Yes sir.

Q. And has it, has that experience been somewhat extended as to laying out new lines?

A. Yes sir.

Q. Tell me what is the practice in doing that work, in the first place, who goes over the line in the first place and makes the first prospective exploration?

A. That is usually done by the chief engineer.

Q. The chief engineer; that is a mere preliminary view of the premises, isn't it?

A. Yes sir.

157 Q. That doesn't mean that it is a technical survey?

A. No sir.

Q. That is to merely go along the route and speculate as to where in a general way it would be best to run the road?

A. Best to make the survey? A. Yes, sir.

Q. That is preliminary to the surveys?

A. That is preliminary to the surveys, yes sir.

Q. And the next step, what is the next step?

A. The next step is usually a preliminary survey.

Q. Well, now, who is that done by?

A. Usually done by an assistant engineer, or locating engineer.

Q. Yes, and the general engineer simply indicates to him his judgment about the general line of the road.

A. Yes sir.

Q. And then the assistant engineer goes on there and runs it; he determines, does he, what he thinks, or what appears to him the most feasible route and makes a survey of it?

A. Yes sir.

Q. That is true is it?

A. He secures data and information, detailed information, and which is discussed between himself and the chief engineer.

Q. Yes, of course, he consults with the chief engineer, and all that, but he substantially after all determines where to make the survey, does he not?

A. Yes.

Q. Yes?

A. Yes sir.

Q. And when he has completed that, that represents his judgment of the route up there, along the line, doesn't it?

A. If he is in doubt as to the location at particular points he usually mentions them and they are examined.

Q. They are discussed?

A. Yes sir.

Q. Examined on the ground?

A. Yes sir.

Q. But when he finally makes up his report, passes it over to his chief, that report represents what his idea is of that line?

158 A. Yes sir.

Q. And then it passes into the hands of the chief engineer?

A. Yes sir.

Q. And then does he take it and examine it?

A. He examines it, yes sir.

Q. Does he go, over the ground?

A. Usually goes over the ground, if there is any question about the location at particular points.

Q. Yes, and in building mountain roads where it is somewhat difficult, it is usually the case, is it not?

A. Yes sir.

Q. And he takes it and goes over the line and overlooks it?
A. Yes sir.
Q. And if he thinks that it should be modified in any way before it is forwarded to his chief, it is modified, is it?
A. Not without the other lines are run and tried.
Q. Yes, and after the chief engineer does that, then he sends it on to the company, or whoever is in immediate authority over him, and as it goes from his hands that represents his idea of that line, does it?
A. Of the final location.
Q. Yes.
A. Of the final location, yes, sir.
Q. Now, in this case, in the first place this line was run by the assistant engineer along over the Ferguson land on the other side of the river, wasn't it?
A. Yes sir.
Q. On the north side?
A. The north side, yes sir.
Q. And work was commenced there, wasn't it?
A. Work was commenced there, yes sir.
Q. And work continued on that side right along in the Ferguson land for a long time, didn't it?
A. I don't know as there was work in the Ferguson land; it was immediately below, or in that vicinity, on the north side.
Q. It was along in that vicinity, on that line?
A. Yes sir.
159 Q. As distinguished from the southeast side?
A. From the southeast line?
Q. It was between Hanging rock?
A. Yes, sir, I think it was.
Q. Work continued in that vicinity up to what time?
A. I don't remember the date.
Q. Well, along in July?
A. I think probably.
Q. Well, that is your recollection?
A. I think along in July possibly, June or July.
Q. And after that time you went up there, and did you—was you the one that made this change?
A. On the other side of the river?
Q. Yes.
A. I said he had better try a line on the other side, yes.
Q. Then he made a trial line?
A. Then he made a trial line.
Q. And submitted that to you?
A. Well, after he progressed a ways on it, he could see that in his opinion it was going to be better.
Q. Well, in his opinion?
A. Yes, and the graders were changed to the opposite side of the river.
Q. And had he then submitted that to you?
A. Yes, sir.

Q. And you finally determined about that, did you?

A. I think I was the one, yes, sir.

Q. Now, when was that, that is what I want to know: you were the one that did that; now then, when was that?

A. I think it was in July some time.

Q. In July?

—. I think, yes sir.

Q. I understood you to say a while ago that you thought that was probably along about the middle of August.

A. It may have been as late as that.

Q. Well?

A. I can't remember the month—three years—two years ago.

Q. No.

A. And the hour and the day.

Q. No. Well now, when did you make that determination?

160 A. I can show you messages and letters that will give you the exact date, if you wish it.

Q. Well, you made that determination, did you take that, in that connection did you write any letters?

A. I think so, yes sir; I think it is in writing.

Q. You think it is in writing?

A. Yes sir.

Q. Now, where is that writing?

A. If there is a letter there would be a copy of it in the office in Salt Lake.

Q. In Salt Lake?

A. If the instructions were in writing there would be a copy of it in Salt Lake.

Q. Can you produce that letter for us?

A. Yes sir.

Q. Can you do that by tomorrow?

A. Yes, sir, I can do that tomorrow.

Q. If you please; I would like to see it; did you testify, Mr. Yard, in your direct examination, or in my cross-examination-in-chief, did you testify that you completed this work of surveying for this road in May?

A. I think for the first line through that canyon was completed as early as May, that is beyond this point.

Q. Yes, but this line that is laid down on this blue print that you have put in here, that you are seeking to condemn in this case, certainly wasn't done until along in August, wasn't completed?

A. Not until July, I think it was.

Q. Well, wasn't finally determined upon them, until along in August?

A. I think it was in July; may have been August.

Q. I understood you to say some time ago that your recollection was, your best recollection was that it was in August. That is all. We will want to recall him for something else. He is going to be here I suppose.

161 Redirect examination.

By Judge HARKNESS:

Q. Mr. Yard, in answer to Judge Henderson, you said the washed bed of the river was 200 feet wide; did you mean the washed bed, or washed-out bed?

A. Not the washed-out bed.

Q. The whole bed of the canyon?

A. The whole bed of the canyon between the foot of the mountains on each side.

Q. Then in speaking of running your line along the edge of that, you mean the edge of the bottom of the canyon?

A. The edge of the bottom of the canyon, yes.

Q. And not the part that is washed out by the water, or covered by the water?

A. No.

Mr. HENDERSON: I think he said along just above the edge of the hills.

Mr. HARKNESS: Yes, but he said the washed bed, the debris, the——

A. Between the main walls of the canyon; along the side of the canyon.

Q. Now in running along the edge of that you get pretty nearly a level line, do you not?

Mr. HENDERSON: Object to that as being leading, if the court please.

Mr. HARKNESS: This is in answer to your examination entirely.

The COURT: Let the witness state what the condition is there, Judge, it has the appearance of being leading.

Mr. HARKNESS:

Q. State what would be nature of the ground as to the direction, and the filling and cutting of the bed, if you keep along close to the bottom of the canyon?

A. It would be nearer a uniform grade line, the contour of the ground would be more uniform than at any other point on the side hill.

162 Q. Now, when you speak of the rise at the right-hand side, the southeast side, you say the rocks rise there, or the hill rises there?

A. The hill rises there.

Q. Going twenty-six feet higher on that, at the Hanging rock, what would be the contour of the road then in following around that height.

A. It would be more tort-ous, more crooked.

Q. What about cutting and filling?

A. Both the cutting and the fills, both the cuts and the fills would be heavier.

Q. Then in regard to the top of the hills themselves, state whether

or not there are any ravines cutting them almost at right angles to the river.

A. There are numerous side ravines.

Q. Would this affect your line much where it ran right along near the edge of the bottom of the canyon?

A. Decidedly so, yes sir, decidedly more.

Q. What?

A. It would decidedly effect the line, yes sir.

Q. The higher you got up?

A. The higher you got up, and the nearer the bottom of the canyon; the flatter the bottom of these side gulches.

Q. Did you mean to be understood that you ever did any work on this Ferguson land, any grading?

A. No, I think we have done no work on the Ferguson, but near there, I think it is on the Murphy, known as the Murphy land.

Q. I think you said that after you had decided on this change to the south side of the river, you reported, to whom did you report it?

A. To the general manager.

Q. Who is he?

A. D. C. Dodge.

Q. Is he also any officer of the company?

A. He is the general manager of the company.

Q. Any other officer?

A. He is the second vice-president and general manager.

163 Q. You spoke of a letter of instructions; did you have it here at the last trial?

A. Yes, sir I think I had several letters of instructions.

Mr. BROWN: That was the instructions from Dodge, but not the report that he made about the river.

A. Small changes of this sort, it isn't always necessary to report to the general manager.

Mr. HARKNESS: Well, the letters that you have are printed in this book?

A. I presume so.

Recross-examination.

By Mr. HENDERSON:

Q. Now, just a moment, Mr. Yard, you say that the higher you go up the side, the more the contour line is changeable?

A. Yes sir.

Q. Now starting at the place where you deviated the first hundred feet you would only be a foot above?

A. Yes sir.

Q. That wouldn't make much difference, would it?

A. Yes sir.

Q. The second hundred feet you would be two feet?

A. Yes sir.

Q. That wouldn't make much difference would it?

A. No sir.

Q. And when you got up to where it was ten feet, that wouldn't make any great difference would it?

A. Might not, no sir.

Q. Well, might not; do you remember any streams that come down there where there beds are so very changeable ten feet above?

A. Ten feet above?

Q. Yes.

A. Yes sir.

Q. Where the banks of the streams, there would be any great difference in them running ten feet higher up?

A. Ten feet higher grade line for a railroad?

Q. Yes?

A. On the side of the canyon?

Q. On the side of the canyon?

A. Yes sir.

Q. The side of this canyon?

A. Yes sir.

164 Q. Within the limits I speak of?

A. At the particular limits you speak of.

Q. Yes, near Hanging rock.

A. I cannot recollect any

Q. Now the only — that you can recollect is where that fork comes in?

A. I know there are a number of gulches, but that is the most difficult one.

Q. Well, do you know of any others where it would make any great changes?

A. On that side of the river.

Q. On that side, of course?

A. I know there — a number of smaller gulches there; just how much of a change it would make I do not know.

Q. Now it would only be 26 feet higher up on the hill at one particular point, and from there up it would taper back to nothing each way, wouldn't it?

A. Below the dam yes.

Q. Below the dam and above where it goes 26 feet up.

A. Some three or four miles up the canyon yes.

Q. Two or three or four miles up the canyon?

A. Yes.

Q. There would be no objection to your running it back, even if you run it down some?

A. Right down into the water?

Q. No, run down into your original line?

A. Oh yes.

Q. That is what I am talking about; I am talking about your going off your line, as you have got it laid here, at a point below Hanging rock, and so as to pass Hanging rock some 26 feet up, and then after that to drop back to the grade line?

A. And then go back to where it is?

—. ——.

A. Make a summit in the canyon.

Q. Make a summit if you call it so?

A. It is a very unusual thing to do; make a summit in the canyon.

Q. Is it; isn't it true that that may be done as well in a canyon as anywhere, if you have got the grade to spare?

A. Yes, it can be done.

165 Q. Yes; one of the great problems to be met in building a railroad up a canyon is to get the grade, isn't it?

A. To get the lighest grade.

Q. Well, to get the lightest grade, and to get up the raises so that you can get down?

A. Yes, sir, overcome the elevation at the lightest grade per hundred feet.

Q. Certainly, and if you strike a place in the canyon such as you describe at Hanging rock, where it is a mile nearly on a level, the change of that over that and down wouldn't make any great difference would it?

A. Well, it would be a very unique piece of construction to put it in there.

Q. Is there any especial up grades above Hanging rock?

A. No sir.

Q. None at all; you have substantially reached the summit then, so far as heavy grades are concerned?

A. This arbitrary summit of the dam you speak of?

Q. Yes.

A. Yes.

Q. Well, according to your elevation as it is now laid, the summit is reached at Hanging rock?

A. A half a mile below.

Q. A half a mile below?

A. Our heaviest grade.

Q. There you have reached the summit of the sharp heavy grade, haven't you?

A. We have reached the summit of the heaviest grade.

Q. You have reached the summit; this would only be a tapering down to your original grade at the South fork?

A. We have no adverse grade though, in the line.

Q. No, but you have a level grade there?

A. We have a level grade there, yes sir.

Q. You have reached a point where you are substantially going off on to the level?

A. Yes sir.

Q. As you have told us here before?

A. Yes sir.

Q. And all there would be about it you would continue a one per cent. grade up there for a half a mile and then taper off on

166 the level?

A. Yes.

Q. Now, tell me how far Hanging rock is from that place where you cross that fork?

A. I can give you that exactly in feet, if I can secure the notes; it is approximately though a mile, possibly a mile and a half.

Q. A mile?

A. Somewhere about that.

Q. Now, the proposition that I put to you about raising one per cent. from Hanging rock up, or from a point a half a mile below Hanging rock up to Hanging rock, would leave you 26 feet elevated from what you now are at Hanging rock?

A. Yes sir.

Q. If you could run back on to the grade of your railroad on a one per cent. grade, you would reach the exact level of the road that you have got now long before you got up to that fork, wouldn't you?

A. We may do so, yes sir.

Q. It would do so, wouldn't it?

—. Oh, yes.

Q. You know that, don't you?

A. Yes sir.

Q. Absolutely sure; there isn't any guesswork about it?

A. Yes sir; we could easily put a 26-foot break in the grade.

Q. Well, a break in the grade; well, is a one per cent. grade on a railroad a heavy bed grade to work?

A. Oh no.

Q. No, that is a very usual grade, isn't it?

A. Yes sir.

Q. Simply say, for instance take a farming country such as—where has your experience been, in what other States than this?

A. Mostly in Colorado and New Mexico and——

Q. Mostly mountainous countries?

A. Mountainous countries.

Q. I don't know, Colorado is mostly a flat, level country, isn't it?

A. Well it is fully as mountainous as Utah.

Q. Well is that part on the east mountainous?

A. Well, the eastern portion isn't.

167 Q. Well, take the eastern portion, you find grades that are level?

A. Yes sir.

Q. Take a farming community such as Illinois, Iowa, and any of those Eastern States, a one per cent. grade is rather a usual grade?

A. No sir, a one per cent. grade in that country is considered a heavy grade there?

Q. Well, it is usual at least?

A. It is usual for this country.

Q. It is usual for that country; it isn't unusual at least is it?

A. Well, I think it is yes sir.

Q. A one per cent. grade?

A. Yes sir; thirty and forty feet.

Q. One foot in a hundred feet?

A. One foot in a hundred feet is an unusual grade east of the Mississippi.

Q. Well, it certainly isn't for this country?

A. It certainly isn't for this country.

Q. A very usual grade; and that variation of grade, a variation of one per cent. would bring you back to a level at that place wouldn't it?

A. Possibly yes.

Q. Well, if it is a mile it certainly would?

A. If it is a mile, yes sir.

Q. And it is approximately a mile isn't it?

A. About a mile.

Q. So that a one-half per cent. would bring you back; that is certainly usual everywhere, isn't it?

A. To run down hill going up a canyon?

Q. To run down hill going up a canyon; you have got to the top of the canyon so far as heavy grades are concerned, haven't you?

A. I think it is an unusual thing to put in an adverse grade.——

Q. I didn't ask you that at all, Mr. Yard; I ask you if it is
168 true, as you have stated here a half a dozen times, if when you reach Hanging rock, you reach the top of the heavy grades?

A. Yes, before that.

Q. So that after you reach that you don't have to study to make raises?

A. No sir.

Q. And after you get there you can shoot off on to the level so that you can slope your grades?

A. Yes sir.

Q. And the question that I ask you was if a half per cent. grade isn't usual in all canyons?

A. Yes it is considered a light grade.

Q. Yes it is considered a very light grade?

A. Yes sir.

This map of course, when it comes in, I shall want to ask Mr. Yard a question about that, but that is all at present.

F. E. BAXTER, called and sworn for plaintiff:

Examined by Judge HARKNESS:

Q. Mr. Baxter, what is your business?

A. Civil engineer.

Q. How long have you been engaged in that?

A. Oh, about twenty years altogether.

Q. Do you know this Provo canyon?

A. Yes sir.

Q. Did you do any work there?

A. Yes sir, I did.

Q. When, and in what capacity?

A. As locating engineer for the Rio Grande Western railway in '96.

Q. Did you have any men, have charge of any men in making the survey?

A. Yes sir.

Q. And what surveys did you make?

A. Made a locating survey from Provo, through the canyon to Heber and Charleston.

Q. Did you keep notes of the survey?

A. Yes sir.

Q. What did you do with the notes?

A. Made maps for a map route and afterwards turned them in to the office of the chief engineer.

169 Q. At what time was the survey made through the canyon which has been spoken of as twelve miles from—or rather, what time did you commence here at Provo?

A. About the middle of March '96.

Q. At Provo?

A. At Provo.

Q. What time did you reach, or did you continue the line right up?

A. Yes sir.

Q. At what time did you reach this land that is known as the Ferguson land?

A. I think it was probably the last of March, possibly the first of April.

Q. What did you do there?

A. I first ran a line on the north side of the river, and I don't know at exactly what point I stopped, but I went back afterwards and corrected the line, went over it various times.

Q. Still on the north side?

A. Yes sir.

Q. Well, at what time did you go to the south side?

A. About the 14th of June we started, and continued the line up the river a number of miles.

Q. Do you know that land that is called the Ferguson land?

A. Yes sir.

Q. You started there on the line on the south side of the river about the 14th of June?

A. Of June, yes sir.

Q. At what time did you complete the line on that side?

A. The line wasn't finally completed until fall, October, that is we were making slight changes and betterments until the fall.

Q. Well, at what time did you locate a line, run a line through on the south side?

A. About the first of July, the first line, and we run through on the south side up to this point, perhaps the last days of June, during the last days of June.

Q. The last days of June or the first of July?

A. Yes sir.

Q. And did you then turn the—what did you do with your
170 notes then?

A. I don't remember whether I kept them in camp for a while or turned them into the office of the chief engineer, but I made a map from the notes.

Q. You did make a map?

A. Yes sir.

Q. Is that the map or the same map?

A. That is not the same map that I made; it is a map of the route.

Q. Where is the map you made?

A. I don't know where it is.

Q. Was your map a map of the whole twenty miles or only of this piece?

A. I made a map of the whole twenty miles, a field map.

Q. Was it here at the trial of the other case, the Murphy case?

A. I think it was.

Q. At what time was the map made?

A. Well, that was made at various times as the work progresses; we kept the map up pretty close back of our work.

Q. Now, you say some changes were made from July down to October, what changes were they?

A. Well, they were changes of—minor changes.

Q. Well, they were within that lateral radius?

A. Oh, sometimes we changed a curve; had the stakes going two or three feet farther up or down on the hillside.

Q. Two or three feet?

A. Yes sir.

Q. There was no general change?

A. No general change

Q. After June or July, whatever it was?

A. After that time yes sir.

Q. Well, where are the notes that you made; did you turn them into the chief engineer's office?

A. I did.

Q. Do you know whether a map was made from them or not?

A. Yes sir, a map was made.

Q. What?

A. Yes sir a map was made from them.

Q. That was after the change to the south side of the river?

A. Yes sir.

Q. Could you tell whether this is a map from your notes or not

171 A. Yes, sir; this was made from my notes.

Mr. HENDERSON: What did he say?

A. It was.

Mr. HARKNESS:

Q. Then after July, any change that was made, was simply two or three feet, to improve curvatures, or something of that kind?

A. Yes sir, to help out the grading quantities.

Q. How?

A. To reduce grading quantities mostly, to fit the line more closely to the ground.

Q. What is the condition in that canyon for twelve miles, say from the mouth of the canyon, which is said to be about six miles from here up past this land, for a distance of twelve miles?

A. Well, it is quite a rough country, quite a steep grade for the

first five miles, I guess, perhaps six miles, and then the grade becomes lighter, however, the canyon is quite abrupt all the way through.

Q. What is the width of the bottom?

A. Perhaps from two to four or five hundred feet.

Q. And about what is the width of the river?

A. Perhaps sixty feet in the narrowest place, and may be as wide as a hundred in places.

Q. Is the canyon straight or crooked, or how does it run?

A. Quite crooked.

Q. And how about the river?

A. The river is crooked.

Q. In regard to the middle of the bottom of the canyon, or the low ground, how does the river run in that, through the center or change around?

A. Changes around, some places next to one hillside and some places next to the other.

Q. There is, on that smaller map there is a piece of land marked "Ferguson"?

A. Yes sir.

Q. Did you find anybody living there on that land?

A. Yes, sir; Mr. Ferguson was living there at that time.

Q. And is his house marked there?

A. It is.

172 Q. And a couple of barns?

A. Yes sir.

Q. Now, going over to the other side of the canyon, what was there on that side in the way of improvements where you- line was finally located?

A. Why, there were no improvements with the exception of a short piece of fence running up against the rocks.

Q. Where was that?

A. At the lower end of Mr. Ferguson's land, and I think possibly there was a fence up near the South fork, on the Provo river; I think there was one there.

Q. Well did the line of road cross that fence?

A. I don't remember; it crossed the first fence, the one at the lower end of the Ferguson land.

Q. Did your notes mark the fence?

A. Yes, sir.

Q. Well, can you tell from that small map whether that fence is correctly marked or not?

A. Yes it is.

Q. And that is on the other side of the river, I think?

A. That is on the other side of the river.

Q. And the only line your fence crosses was the one at the southwest end?

A. Well, the map shows another fence on the north side of the river, the line for a short distance is on the north side of the river; we expected to make a channel change there.

Q. Well, is there any fence crossing your line excepting the one at the south end there?

A. Yes sir, there is one fence.

Q. Yes, that is it; about the center of his tract, then there was a fence crossed your line?

A. Yes, it was nearer the upper end of his land; about two-thirds of the way up.

Q. Yes, about two-thirds of the way up; and one at the southwest end?

A. One at the southwest end.

Q. And how far do those fences run across your track?

A. Well, simply run up the hillside to the rocks.

173 Q. About how far would that be from your line?

A. I think the lower fence *fence* ran perh-ps two or three hundred feet.

Q. And the upper one?

A. I suppose two or three hundred feet.

Q. Did you find any other improvements on that land on that side of the river?

A. No sir.

Q. Any crops?

A. No crops.

Q. Any buildings?

A. No buildings.

Q. Any tilled land?

A. No sir.

Q. What kind of land does the line run on through what you suppose to be the Ferguson land; just describe it?

A. Why, it runs through side hill sages almost together, with the ex*d*eption of a short distance at the mouth of the South fork of the river; the land is generally steep and rocky.

Q. You run close to that, do you, close to the——

Mr. HENDERSON (int.): I object to that as leading and suggesting Judge, I think that is——

Mr. HARKNESS: Well I would like to get through with this.

Mr. HENDERSON: So would I, but I want to get through with it right of course.

The COURT: Omit leading as much as possible.

Mr. HARKNESS:

Q. Through the Ferguson land or what is marked as the Ferguson land, what kind of land does the line of a hundred feet wide on each side run on?

A. It runs in general on rough, steep ground, and part of it is on the river bed.

Q. Is there any of it down on the tillable ground?

A. A very little of it, yes sir; at the mouth of the South fork.

Q. At the mouth of the South fork.

A. Yes sir.

Q. Is that South fork on this map?

A. Yes, sir; it is on this map.

Q. What do you say as to the location being a practicable or feasible one in that canyon?

A. I think it is a practicable and feasible location.

174 Q. That is all. Oh, one word; you changed to the south side of the river along some time between——

A. Some time the last of June or first of July.

Q. How many miles does that change there at that place?

A. I can't remember; but there are several miles.

Q. Well, where does it begin, you can tell by the map?

A. About four miles and three-quarters.

Q. You say you made a map yourself; what kind of a map was that, a field map?

A. Yes sir.

Q. Did you turn all your notes of that twenty miles into the surveyor general's office after you had completed the—to the chief engineer's office, after you had completed it?

A. Yes, sir; I did that fall; turned all my notes in in the fall. That is all I think.

Recess until 2 o'clock p. m. with usual caution to jury.
Resumed session at 2 p. m.
Jury called, all present.

F. E. BAXTER, recalled for plaintiff.

Examined by Mr. HARKNESS:

Q. Mr. Baxter, I think I omitted to ask you whether the surveyed line through the Ferguson lands was connected in any way with other parts of the line, and how?

A. It connected with the first line at both ends.

Q. What?

A. It connected with the line that was first run at both ends.

Q. I am speaking of the line through the Ferguson land especially?

A. Well, the line through the Ferguson land was connected with the original line above and below the Ferguson property. That is all.

175 Cross-examination by Judge HENDERSON:

Q. Where does it connect with the original line above the land?

A. Perhaps two miles above the Ferguson place.

Q. And where below?

A. Two miles or more below.

Q. There is to be four miles?

A. There is more than four miles four miles and three-quarters between the two ends.

Q. Four miles and three-quarters that doesn't follow the old survey?

A. Yes sir.

Q. I understood you to say when you were shown this large map, that it was made from your notes, did you say that?

A. Yes sir, I did.

Q. Now, how do you know that?

A. Well, I recognize and remember certain parts of the line, and I know that map is a map of the line.

Q. Yes, but you didn't make the map?

A. No sir; I didn't make that map.

Q. And you wholly depend for your statements upon your recollection?

A. My recollection and the line.

Q. Approximately, it runs up that canyon, and your survey was up that canyon, and you think approximately it seems to be about the same line?

A. Well, that isn't the only thing; I know particular pieces of the land, know how they lay with reference to the river, and hillside, in certain places.

Q. Now you say you turned over your notes and map at the same time, when was that?

A. I turned over maps of part of the line from time to time as I finished them.

Q. Well, when did you turn over your first map?

A. I think I turned over the first map about in the fore part of April.

Q. Fore part of April; and that would be, I suppose that each one of these maps shows a supposed line for the twenty miles, did it?

176 A. No, it showed as much of the survey as I had finished.

Q. As much as you had finished?

A. Yes.

Q. Well, how much had you finished up to this first one that you had made, how much had you surveyed over at that time?

A. I don't remember.

Q. Well, don't you recollect how far up the canyon you was with your survey when you made your first map, turned it over?

A. No, sir; I don't remember.

Q. Well, was it up as far as Hanging rock?

A. I think not—I think the piece was—didn't extend, the first map didn't extend as far as the Hanging rock.

Q. Well, up to what point did your first map extend?

A. I don't know the exact point, but I think it was somewhere in the canyon, from Provo.

Q. Well, yes; but the canyon is about how long?

A. Ten or twelve miles I guess.

Q. Ten or twelve miles; well now, can't you be any more definite than that?

A. I don't remember the exact point at which the map was made.

Q. Well, you told me that before, I had asked you now about, approximately; you can't tell us nearer than to say somewhere in the canyon? I will ask you Judge Harkness, if you have that map?

Mr. HARKNESS: It isn't a map; it is notes.

Mr. HENDERSON: Well he said it was a map.

Mr. HARKNESS: You asked him when he turned the first map over and he stated his map; you mean field-notes?

Mr. HENDERSON: When did you turn over the first map now?

A. I think it was in April, the fore part of April.

Q. Well, that was a map was it not?

A. Yes it was a rough, what we call a field map, a rough map.

Q. Well, was it made something like this?

A. Yes, on a larger scale that that.

177 Q. Yes, on a larger scale, but it showed the line?

A. Yes, sir.

Q. And substantially the way this map goes?

A. Yes sir.

Q. I don't mean that that showed the same route on the ground, I mean that the general course of the map was like this?

A. Yes sir.

Q. Now I repeat the question again, to where was it, to what point did that cover up the canyon?

A. Well, it might probably have extended up three or four miles up from the mouth of the canyon.

Q. From the mouth of the canyon?

A. Somewhere below Thayer's.

Q. Now then did you make the next map?

A. I don't know, but I went to work on the next one immediately. I don't know when I finished another section.

Q. Now, up to what point did that come?

A. I don't remember.

Q. Well, now, can't you tell us anything about the points that you included in your maps, your various reports that you made to the company?

A. I can't remember the particulars. Can't remember how long those sections were, or when they were turned in, when they were made.

Q. No recollections about where they went to, that second one?

A. No sir.

Q. Or when it was turned in?

A. No sir.

Q. Well, can you tell me anything about when you got up to Hanging rock?

A. Only approximately; it was the fore part of April.

Q. Fore part of April that you got up there; how close up to your work, to your field-notes did you make your map?

A. Well, I varied; sometimes we were within a few miles of the end of the survey, and sometimes we were a good deal more behind.

178 Q. Why Mr. Baxter, is it possible that you can't give me an approximate idea of when and how you turned your maps, your reports that you made of this work, to the company?

A. I can't give the particulars.

Q. Well, can't you tell me any nearer than to say that you don't know when it was done, nor to what point it went?

A. Not as to the later map, the first I know approximately when the first map was turned in, and approximately how far it extended, but I have forgotten about the next one.

Q. Well, now, give me your best judgment about when you turned in that second map?

A. May have been the latter part of April, but my recollection is very dim on that point.

Q. Well, may have been; is that your best recollection from what you can now remember?

A. Yes, sir; that is my best recollection, so far as I can remember now.

Q. And what is your best recollection about what point that went to?

A. I think it extended above Ferguson's.

Q. Above what?

A. Mr. Ferguson's place.

Q. Above Ferguson's?

A. I think so.

Q. Well, now, your recollection would be then, that along in April some time, did you say?

A. The latter part of April.

Q. The latter part of April, you turned in a map that went up to and beyond Ferguson's place?

A. Yes sir.

Q. That is right; is it, and that map laid the line on the northwest side of the river?

A. Yes sir.

Q. All the way up, that is all the way up from Hanging rock, and from below Hanging rock?

A. Yes sir.

Q. Now when did you make the notes?

A. Well, I don't know; I went right along with the work, however.

Q. You went right along with the work, you continued that work on up how far?

A. Oh, I think I ran the line up as far as Deer creek.

Q. Deer creek; how far is that above Hanging rock?

A. I think it is five or six miles.

Q. And do you recollect about what time you got up to Deer creek with that work?

A. I think it was in May.

179 Q. In May; now when you got up there, you had simply made a survey, and had your notes of the survey?

A. Oh, I made maps as the work progressed.

Q. Well, I understood you to say a little while ago, sometimes you was up with it, and sometimes you was quite a few miles behind with the maps?

A. Yes, sir, I said so.

Q. And about when do you think you finally completed a map up to Deer creek?

A. Oh, probably some time in May.

Q. Some time in May; well, I suppose those maps when you turned in the first one it took it up to a certain point, and then when you turned in the other it was simply a continuation?

A. Yes sir.

Q. And that was the way your preliminary survey was made at that time?

A. Yes sir.

Q. And when you got up to Deer creek that showed a proposed line from Provo clear up to Deer creek?

A. Yes sir.

Q. And you think you turned that in; to whom?

A. To the chief engineer.

Q. To the chief engineer, along in May some time?

A. Yes sir.

Q. The fore part or latter part of May?

A. I didn't understand the question.

Q. The fore part or latter part of May?

A. I think the latter part.

Q. You think the latter part of May that was turned in? That was the course that that would take would be to go from you to the engineer, and if it was transmitted from him beyond that to the company, it would go from him to the company?

A. Yes sir.

Q. Now after that was done, what did you next do then after you had completed this map up to Deer creek?

A. I think I came back and went over the line again.

Q. Yes, commencing at Provo.

A. I don't know whether I came all the way to Provo or not, or to the mouth of the canyon; I don't remember exactly.

180 Q. Well, don't you remember whether you went over and re-examined that work from the beginning or not?

A. I don't think I came all the way to Provo; I think I went to the mouth of the canyon and started.

Q. Well, you probably came out some little ways out from the mouth of the canyon so as to revise your work before it went into the canyon?

A. I think I reran the curve at the mouth of the canyon.

Q. Yes, you commenced there to make a re-examination?

A. Yes sir.

Q. Of the line?

A. Yes sir.

Q. And how fast did that work progress?

A. Well, I don't—it is pretty hard—I don't remember how fast.

Q. Don't remember about that?

A. No, sir.

Q. How long after you commenced do you think it was before you got up to Hanging rock with that re-examination resurvey?

A. I got up to Hanging rock the latter part of June.

Q. The latter part of June when you got up to Hanging rock, so that in the month of June you was at work beyond Hanging rock?

A. You mean up the canyon from Hanging rock?

Q. Yes.

A. I think I did some work above Hanging rock—I know I did in June.

Q. In June; when was it that you finally turned in a map showing the change over on the southeast side of the river?

A. I don't remember.

Q. Was it in July?

A. May have been the end of June, or in July.

Q. Well, would that be your recollection that it was the end of June, or in July?

A. Yes, sir, it would.

Q. When did you enter upon the survey—when did you begin surveying a proposed line on the southeast side of the river along through the Ferguson lands?

A. I started that change on the 14th of June.

Q. The 14th of June?

A. Yes sir.

181 Q. That you started that?

A. Yes sir.

Q. Let's see, you testified in the case here before, did you not?

A. Yes, sir.

Q. Do you remember what you testified, in relation to that at that time?

A. No sir.

Q. Do you remember of testifying that it was in July before you commenced to make any survey on the southeast side of the river above Hanging rock?

A. No sir, I don't remember that.

Q. You don't remember that?

A. When I said I commenced on the 14th of June, that was below Hanging rock. I didn't say I worked above Hanging rock on that day. It was on that change there.

Q. It was on that change.

A. Yes sir.

Q. Now, what is your best idea now of when you got up above Hanging rock and the Ferguson land, and first made a survey on the southeast side of the river?

A. It was the last of June, during the last days of June.

Q. The last days of June?

A. Yes sir.

Q. That you got up there and commenced the resurvey there?

A. Not to commence; that is the time I got up there with the survey. I didn't commence it.

Q. Well, I say, the time you reached there with the survey?

A. Yes sir.

Q. Was the last of June?

A. Yes sir.

Q. And you went on with the survey from there?

A. Yes, I went on.

Q. Now, you certainly didn't make any map of it until you had surveyed it did you?

A. No sir.

Q. No; how long was it after you had surveyed that before you made a map?

A. I don't recollect.

Q. Well, give us your best impression about it.

A. Very soon after I made the survey.

182 Q. Well, about when did you finish that survey?

A. It wasn't finally finished for some time after that; I don't know when it was.

Q. Well, give me your best recollection about when it was?

A. The line first run on the south side I think it was run through by about the first of July; of course I worked on it all summer after that; off and on.

Q. Well, what I am getting at, the first line was run through by about the first of July?

A. Yes sir.

Q. Along by the Ferguson land you mean?

A. Past the Ferguson land.

Q. Past the Ferguson land; to a point beyond the Ferguson land; now how soon after that did you turn over to your principal, to your superior a map of that survey on the southeast side?

A. Pretty soon after that; I don't know how long.

Q. Well, what would you say? Pretty soon; two weeks after that?

A. A week or two, probably.

Q. A week or two; yes, so that would be the middle of July?

A. May have been the middle of July.

Q. Well state whether that is the probability or not?

A. I think it was between the first and middle of July.

Q. Well, I understood you to say you got up there and made that survey about the first of July?

A. Yes sir.

Q. And, well, a week or two after that, that you turned over the map?

A. Yes sir.

Q. Well, that would come pretty near the middle of July, wouldn't it?

A. Well, that would be the outside limit, the latest limit; may have been earlier.

Q. Well latest limit, it would be from the 10th to the 15th of July; and now, he checked it, did he?

A. I supposed he did; I turned it over to him.

183 Q. Now when did he tell you after that, inform you, or direct you that that was to be the line?

A. I don't know.

Q. Did he ever?

A. Yes sir.

Q. He did at some time; how often was Mr. Yard up there during that summer?

A. Oh, I guess he was up there five or six times.

Q. Yes, he was up five or six times during the entire summer.

A. Yes sir.

Q. And now can't you give me some idea about when it was after you turned in this map that he first informed you that that was to be the line?

A. No, sir I can't remember.

Q. Well, you must have some idea about it; you say he did?

A. He told me beforehand; before we started in on that, that it would be the line under certain circumstances; if I found the work in certain conditions.

Q. Well under certain circumstances, of course; I don't suppose you were surveying it for fun; I suppose you were surveying it for some reasonable purpose, and for the purpose of determining that which had not been determined?

A. Yes sir.

Q. But when did he tell you after it was done that it was to be the line?

A. I can't remember.

Q. Well, give me your best judgment about how long it was after you turned the map over to him?

A. He might have told me before I turned the map over.

Q. Why, of course, he might have told you before you started making any survey in the spring; that isn't the question, Mr. Baxter; now give me your best judgment about when it was; you have already answered that you did turn over a map, and you say that he did tell you that that was to be the line, and now I would like to have your best judgment as to when that was, how long it was after you turned that map over to him?

A. Well, I can't tell; I don't know whether I turned the map over, or after I turned the map over that he told me.

183½ Q. Well, this map that you have spoken of was the first map that you did turn over to him of the corrected line?

A. Yes, sir; of the line on the south side of the river.

Q. Yes, and you can't tell whether it was before or after, or when it was, or if it was after, how long it was after?

A. No, sir.

Q. No recollection about it at all?

A. Not as to the date, not as to the time.

Q. Well, I am not asking you now of the particular date, understand me that, Mr. Baxter; I have asked you if you have got any impression about how long it was, and if so, let's have it?

A. No, sir; I have no recollection at all.

Q. No recollection at all, and no impression about how long it was. Now you—or I will call your attention to this blue print; I ask you if that point here—I will withdraw that, and let me identify this. I will ask you if that blue print, if the dotted red line there with purple lines on each side represents the bed of your proposed road through the Ferguson land?

A. I believe so.

Q. Yes, does that represent it according to that last corrected survey you have just been speaking about?

A. I don't know there may be some minor changes. It repre-

sents the general location of it; but whether or not any particular curve has been changed since, I cannot testify to that. It represents the general location of it, and perhaps the exact location.

Q. Does that represent, running through the Ferguson land, the route that was laid down on that first map you turned over?

A. I think it does.

Q. The first one?

A. Not the very first may, no sir, I thought you were speaking of the one——

Q. (Int.) I mean the first map?

A. No sir, it does not.

1831/2 Q. It does not; does this land that is included within those purple lines, does it represent any part of the lands that was covered by the map showing your location, that first map, the first one?

A. Well, very little, if any.

Q. Well, where, if a little?

A. Well, right—this point above Ferguson's where the road comes pretty close; the original line was down here about where the wagon road here, which seems to be about a hundred feet from the railway line.

Q. Well, let's see this?

A. Yes sir.

Q. Here is the river; and that line was above the wagon road there, was it?

A. Well, right at this point, and immediately below the wagon road here (illustrating).

Q. Well, there it tapers, I see.

A. The line runs around here.

Q. Do you think that according to the scale of that map that at the point there it was above the road, wasn't it?

A. Yes, right at the point.

Q. Yes, at the point, and that is where it runs nearest to it, didn't it?

A. Yes.

Q. Do you think that a point to the other side of the road would be within a hundred feet on that map?

A. It would be pretty near a hundred feet.

Q. Well, pretty near; I ain't talking about pretty near.

A. Well, I can't tell without a scale.

Q. Haven't you got any?

A. No sir, I haven't a scale.

Q. Can't you tell with your eye that it is further from the center of the red line to that purple line—or isn't it as far from that red center line to that purple line, as it is from the purple line over to a point beyond the road?

A. Seems to be about the same distance.

Q. Seems to be about the same?

A. Yes sir.

Q. That is the only place, if at all, where it would even approach——

184 A. There is one other place above there.

Q. Where?

A. The line ran through a point of the hill there.

Q. Yes; well, it ran through that point of the hill.

A. Right here.

Q. Yes, well, that would be more than a hundred feet, wouldn't it, to that?

A. Well, I don't know; it would be pretty close.

Q. It would be pretty close; let's see, where is the river there?

A. It is on the same side of the river that the original line was.

Q. That is where you crossed the river twice, and was there a tunnel through there?

A. No, sir a deep cut, there.

Q. Was there any work done in that cut?

A. No sir.

Q. No work; your stakes were set there?

A. Stakes were set.

Q. Isn't it true that your stakes were set back there a full hundred feet from the point of the hill?

A. I don't think so.

Q. You don't think so?

A. Not that much.

Q. Well, that would be a mere point, wouldn't it?

A. Yes sir.

Q. Just a single point?

A. Yes sir.

Q. If it approached it at all?

A. Yes sir.

Q. Outside of that did it cover any of the lands, or could it cover any of the lands that was in that first survey?

A. No sir.

Q. None at all; substantially that first survey was a different piece of ground from what it is shown on this, isn't it, wasn't it?

A. Yes sir.

Q. Now you have testified something about the character of that canyon up there; the raise in that canyon is sharpest from a point about half a mile below Hanging rock down to the mouth of the canyon, isn't it?

A. Yes sir.

Q. That is the narrows of the canyon?

A. Yes sir.

Q. And the rapids of the canyon?

A. Yes sir.

Q. And what is your highest grade?

185 A. Two per cent.; maximum grade.

Q. The maximum is two per cent.?

A. Yes sir.

Q. You have spoken of the main line, do you know anything about what the maximum grade is on the main line, D. & R. G. Western?

A. Yes sir.

Q. What is it?

A. About four per cent.

Q. About four per cent. is the maximum; and the maximum grade up there was two per cent.?

A. Two per cent., yes sir.

Q. That was its highest grade?

A. Yes sir.

Q. When you reached a point about a half a mile below Hanging rock, which is there (illustrating) you have reached the top of the higher grades?

A. Yes sir.

Q. From that point on there are no difficult grades?

A. No sir.

Q. From that point up to Hanging rock it is less than one per cent. grade isn't it?

A. I think it is; I don't recollect exactly.

Q. Yes, and from that point on the hills on each side are not as abrupt, are they; they roll back more gently, do they not, from the canyon?

A. Well, I think they are about as bad above as they are below.

Q. Above Hanging rock?

A. Yes sir; especially on the south side of the river; and on the north side of the river it is bad too if you have to go up quite a distance; but right at Hanging rock it isn't so bad.

Q. What was the object of your crossing the river there twice on the Ferguson lands?

A. Why, we had to do that, because we couldn't cross around on the hillside; couldn't keep up on the hillside without making a couple of tunnels.

Q. Without making a couple of tunnels; point out on that map where there are projections on the hill that would make it necessary to make a tunnel?

A. In order to keep out of this flat ground you would have to had gone up this South Fork valley, and there is a short point there, and another here, and in order to get up there we would
186&187 have to dig a tunnel through here, and another through here, and so I kept in the bottom.

Q. Couldn't you have kept on the hills here, and turned around there—how is that (illustrating)?

A. Well, there is a very sharp curve here, and if I had kept this curve going I should have run into the river anyway.

Q. Now what was the scheme there, was it to maintain two bridges across the river?

A. No sir, change the channel.

Q. Change the channel; it necessitates a change of the channel of the river there?

A. Yes sir.

Q. Your idea was to——

A. (Int.) Run the river down on the north side of the track—of the right of way.

Q. That is, make a channel for the river, and I suppose put in rip-rap work there to support it?

A. Well, if necessary; if the ground had not sufficient stone to maintain it.

Q. Let's see, did you continue that survey that you first made up through to Park City?

A. Yes, I have forgotten whether I made the survey to Park City that year—yes, I made it in '96.

Q. Yes, you made it that year?

A. Yes sir.

Q. You continued right on with your survey to Park City?

A. Yes sir.

Q. And you run through Daniel's canyon to get there, didn't you?

A. Yes sir.

Q. Do you remember what the maximum grade in Daniel's canyon is?

A. Three and a half per cent.

Q. Three and a half per cent. up there?

A. Yes sir.

Q. Now you say, you have stated that it was in March, did you say when you first went up there, and got up to Hanging rock, or April?

A. It was in March when I started the survey; I don't know whether I got to Hanging rock or not in March?

Q. Oh, exactly; you started from Provo here in March?

A. Yes sir; in March.

188 Q. Now when you got up to Hanging rock, what did you find there in the way of any improvements or work of any kind?

A. I don't think I noticed anything in the way of improvements at Hanging rock at that time.

Q. Did you notice any preparations for improvements?

A. No sir.

Q. Did you find a gang of men at work there?

A. Not that I remember.

Q. Not that you remember; well, would that be a little circumstance that you would entirely overlook?

A. I think I would have remembered if I saw them, if I had seen them there.

Q. Well, at a point just this side of there, what do they call that?

Mr. HARKNESS: Middle rock.

Mr. HENDERSON:

Q. The point just below Hanging rock?

A. Yes sir; I think there was some brush cleared away there.

Q. Well, some brush cleared away; I am asking about whether there were men at work there?

A. I don't recollect.

Q. You don't recollect; you haven't any recollection; was it so ordinary that you saw gangs of men there at work in the canyon that you don't recollect whether you found a gang of men working there?

A. I know there were men at work in the canyons.
Q. Well, where?
A. I think they were working down near Thayer's.
Q. Near what?
A. Near Mr. Thayer's place.
Q. Where is Thayer's place?
A. I suppose about three-quarters of a mile below Hanging rock; I don't recollect exactly.
Q. You suppose three-quarters of a mile below Hanging rock; what were they doing?
A. I think they were clearing brush, and perhaps some of them were doing some grading.
Q. Some grading, what kind of grading?
A. I think they were gra*id*ng a flume bed, or something of that kind.
Q. Yes, grading a flume; now you did notice that, didn't you, there at a point just a little ways below Hanging rock.

189 Mr. HARKNESS: I want to call attention of the court, if counsel goes into this examination as a cross-examination, that when we get to rebuttal, we do not deem ourselves estopped by it.

Mr. HENDERSON: Not at all, that is true.

The COURT: That will be understood.

Q. Did you find—just above Hanging rock, did you find any stakes stuck there?
A. No sir.
Q. Didn't you see any stakes stuck up there when you first got up there?
A. At Hanging rock?
Q. Yes, just above Hanging rock?
A. No, sir, I don't remember seeing any stakes there at that time.
Q. Did you at any time?
A. Yes sir.
Q. When?
—. I saw one in June upon the rock.
Q. In June, and you didn't notice anything of that kind when you first went up there?
A. No sir, not at Hanging rock.
Q. Did you see any stakes stuck below there?
A. Yes sir.
Q. Where was that?
A. About a quarter of a mile above the bridge on the county road.
Q. About a quarter of a mile above the bridge; were these men at work, above or below that point?
A. There were some at work below; and I don't know whether there were any above or not; I hardly think there was.
Q. Don't you know that there were men at work?

Mr. HARKNESS: Well, I think I will object to this line of examination as not cross-examination at all, in the interest of time.

The COURT: Well, it is not strictly cross-examination.

Mr. HARKNESS: Not in answer to anything we have asked.

The COURT: I don't remember any matter that was gone into.

Mr. HARKNESS: We will have to go over the matter again if we go through it now.

Mr. HENDERSON: Well, I don't think I will ask it. That is all.

189½ Redirect examination.

By Mr. HARKNESS:

Q. Mr. Baxter, did you have your men divided into more than one party?

A. I think they were part of the time.

Q. You have stated that you couldn't give the time you turned your last map over on the south side; I will ask you whether there has been any graders at work on the north side——

Mr. HENDERSON: What is that, before we went up there.

Mr. HARKNESS: No, before he turned over that map.

A. Yes sir.

Q. Now, do you know when those were changed to the south side?

A. I don't know exactly when they were; I think it was the first of July though.

Q. Well, how would that change of grade compare with the time that you finished your survey on the south side?

A. Well, I had finished the survey at that point, they went to work on it.

Q. And you think they were to work over there on the south side some time in July?

A. Yes sir.

Q. You have said in answer to a question here that you worked there all summer; do you mean that you worked on the Ferguson land all summer?

A. No, in various parts of the canyon, I worked, had men there all summer.

Q. What kind of work was that?

A. Well making improvements in the line, location of the line.

Q. How much change, if any, was made in it?

A. They were very slight changes.

190 Q. Curvatures, etc.

A. Yes.

Q. How many feet was it changed?

A. Just a few feet as a rule.

Q. Now what distance from the line on the north side through the Ferguson land is the line on the south side?

A. About 250 feet.

Q. All the way or——

A. Maybe as much as three hundred or 350 in places.

Q. Well, I am speaking, that is the maximum, is it?

A. Yes, I think that 300 is probably the maximum.

Q. Well what would be the least departure?

A. About two hundred or 250 feet.

Q. Didn't you have some points that you said would change very slightly?

A. There are some points that the tracks would be nearly identical, that would be where they met together.

Q. You say the blue print represents the line as you finally completed it, unless it is in the correction of curves, etc.?

A. Yes sir.

Q. To what extent would that correction change the alignment?

A. Well, to a very slight extent; to only a few feet.

Q. A few feet; practically all be within the same land.

A. Yes sir, practically the whole thing.

Q. You have been asked whether the line on the blue print represents the survey, the first survey you made; by that you mean the first survey on the north side, I take it?

A. Yes sir.

Q. So when you have spoken of the first survey in answer to Judge Henderson, you refer to the first survey that you made on the north side of the river?

A. Yes, sir, that I made on the north side of the river.

1902 Q. How was this line through the Ferguson land staked, or how was it marked on the ground?

A. Marked by a stake every hundred feet on benches, and fifty feet on the curves, and sometimes closer.

Q. Was that the center line that was marked by stakes?

A. That was the center line that was marked by stakes.

Q. Fifty feet apart; what kind of stakes?

A. Well, pine stakes sixteen inches long by an inch or two inches across it.

Q. Any marks?

A. Yes sir, marked with station numbers.

Recross-examination by Judge HENDERSON:

Q. You have spoken here of a first survey north of the river; I asked you about the first map that you returned to the principal engineer; which you said you gave to him I think along in June, if I recollect, or the latter part of May?

A. In April, I think, that is of the survey on the north side of the river.

Q. The survey on the north side of the river?

A. I think I said I turned that in in April.

Q. Now that was one that was on the northwest side of the river, was it?

A. Yes sir.

Q. Now the first one that you returned to him on the south side of the river is the one that you have already testified about, wasn't it?

A. I don't understand the question.

Q. The one that you have already testified in answer to my ques-

tions about, on the south side of the river, I mean, the map is the first one that you returned to the principal engineer?

A. I only returned one map I think of the line on the south side.

Q. Yes, on the south side; that answers that; now how
191 many men did you have in your employ under you?

A. Well, I had from three to about fifteen.

Q. Three to about fifteen; what portion of the time did you have fifteen?

A. From the middle of the summer on.

Q. From the middle of the summer on?

A. Yes sir.

Q. Well, what do you mean by that, the middle of the summer, the middle of July?

A. Well, the time I went up Daniel's canyon; I think it was in July.

Q. Yes, from that time you had about fifteen men?

A. Yes sir.

Q. Now, now I mean before you got to Daniel's canyon, up to the time you got up, way up past Ferguson's?

A. Well, I had, most of the time, I had from four to eight or nine.

Q. Yes, four to eight or nine; now up to that time there was no occasion for your dividing your gangs was there.

A. No sir.

Q. Up to the time you had surveyed up passed the Hanging rock, and way up past the Ferguson land, and until you got way up above there into Daniel's canyon, and into that work up there, you substantially worked in one gang?

A. Yes sir.

Q. I want to ask you if you think by looking at this map that the maximum distance of the center of the line on the north side from the center of the south side is only two or three hundred feet?

A. I think I said it might be 400 in some places, though I think 300 will cover it.

Q. You think 300 feet?

A. I think 350 would be the maximum.

Q. Yes, and it would be an average would it not of 300 feet?

A. Perhaps 250 or 300.

Q. What do you mean when you speak of a gang of surveyors, how many men does that include?

A. Well, it doesn't—it may mean two or three men, and
192 it may mean a dozen; no fixed number.

Q. No fixed number?

A. Depends on how much—how fast the progress is that is desired, and the difficulty of the country, etc.

Q. It rather depends upon whether they are working together under one head?

A. Well, depends on the character of the work and the, and what the progress necessary is.

Q. Well, I understand you to say anyway, that until you got way

up there into the Daniel's Canyon country that these men were working in one gang?

A. Yes sir.

Q. Mr. Baxter, where are your notes of this survey?

A. I think the most of 'em are down here in Provo.

Q. Down here?

A. Yes sir, I think so.

Q. Oh, I understood you to say they were in Salt Lake?

A. I think they are here.

Q. They are here, the original field-notes?

A. The most of them are here.

Q. Now you can tell us from those, can't you, the exact first line?

A. The exact what?

Q. The first line?

A. If we happen to have the notes here of the line, yes sir.

Q. Well, I say you can tell from those that first line exactly, can't you?

A. I think so, yes sir.

Q. Now can you tell from those also what the grade is at different parts of the road?

A. No, I haven't got the profiles here; the grade is shown on the profiles, and I haven't got the profiles here.

Q. Where are the profiles?

A. I think they are in Salt Lake in the chief engineer's office.

Q. Can you tell the exact date that they were made?

A. No, not at all because the date was omitted in a good many instances, I never took no notice——

Q. Well, they are taken often enough aren't they so that you can tell approximately?

A. Well, yes.

193 Q. Are those notes here in the court-room?

A. I don't think so——

Q. (Int.) How is that?

A. Yes sir.

Q. In the court-room?

A. Yes sir.

Q. Just get them, will you?

A. Here are some of them, I don't know whether these are the notes in question.

Q. Well, haven't you got the others here?

A. These are notes covering the south side of the river, and show when I started that line.

Q. Well, I would like those for the north side too, if you please. Now, do your notes show when you started this work here in Provo: do you find that?

A. I don't find any dates in these.

Q. No dates at all?

A. There might be some.

Q. Where is the commencement of it Mr. Baxter?

A. It doesn't seem to me the first book is here, I don't think the first book is here.

Q. That isn't it?
A. No sir.
Q. Well, now where does the second book commence; is this the second book?
A. Yes sir: I think that is the second one.
Q. Where does that commence?
A. Well, there at station 245; that is four miles and a half out from Provo, re-running the line.
Q. Well, can't you tell which are the first and second book of the original survey?
A. Well, I know this isn't the first book.
Q. Well, that is when you were commencing on the second line the second survey I understand?
A. Yes sir.
Q. Well it is probably the first book then; you testified that you did not commence clear back to Provo.
A. Probably the first book.
Q. It is the first book of the second survey then?
A. I think it is.
Q. Now can you tell me anything about when it was started?
A. I don't find any dates here; there is May 11th, '96, the first date I see here.
194 Q. Where is that?

Mr. HARKNESS: I can't see that.

A. (Indicating.) May 11th '96.
Q. Well, what is May 11th, 1896?
A. It is the first date I find here; that is probably the second book of the survey, not the first book.

Mr. HENDERSON:

Q. Where was that you were at work?
A. Well, station 43; about a mile below Thayer's.
Q. About a mile below Thayer's; about how far below Hanging rock?
A. Must be about two miles; that is about two miles I think from Hanging rock.
Q. About two miles below there?
A. I think so.
Q. May 19th?
A. May 11th.
Q. Now, have you got the book there which shows when you commenced on the south side of the river?
A. Yes sir.
Q. Where is that?
A. Right there (indicating) it shows the line on the right-hand side of the river June 18th.
Q. June 18th?
A. June 20th.
Q. June 20th; now where was you then?

A. We started out about station 5.7. I can tell from that map where this is.

Q. Which map?

A. That large filing map. There is 5.7 right at the bridge.

Q. At the bridge?

A. At Thayer's.

Q. About how far is that below the Ferguson land?

Mr. HARKNESS: What date is that?

Mr. HENDERSON: June 20th.

A. About a mile; a little over a mile and a half below Ferguson's house.

Q. Below Ferguson's house; now that was June 20th, was it?

A. Yes sir.

Q. Now, look, on there, see if you come to any others?

A. There is June 22nd; June 23rd; June 24th (indicating).

Q. Well now, where was you June 24th?

A. June 24th, station 645, that is the beginning of the day, it is on the Ferguson land; the four hundred feet of that——

195 Q. Where is that?

Mr. HENDERSON: It is just about a little below the Ferguson land and that is June what?

A. June 24th.

Q. Which side of the river is that?

A. The south side of the river; southeast side of the river.

Q. Now does that help you to tell in any way about when you made up your map on the south side and submitted it?

A. On June 26th, I was on the upper end of the Ferguson land.

Q. Yes, June 26th; now take that book and tell me if you can when you got around to the point where you would strike the old line, get back on the other side of the river?

A. I can't find the dates here, but at June 26th, I was within about a mile of the end of the change.

Q. Within about a mile of the end?

A. Yes sir.

Q. Now that was the dates when the notes were made?

A. Yes sir.

Q. Did you make these notes?

A. I made these that I quoted from, yes sir; made these in person.

Q. That was the date that the field-notes were taken on the ground?

A. Yes.

Q. Now, I want to call your attention again to this blue print, and call your attention to what you testified about that point here; the nearest point here, where this would come in; I believe you testified that in rounding that point right there the old line went above the road?

A. Crossed the road right here.

Q. Didn't you state before that you crossed it as you got up there rounding the point?

A. Yes.

Q. That is you round the point above the road, don't you?

A. Yes sir.

Q. Now, I want you to take that and tell me if the point above that road is not more than a hundred feet away from the northwest line of this road?

A. Well, it is a little less than a hundred feet to the point above the road.

196 Q. A little less?

A. Yes sir.

Q. That is the way you measure that, is it?

A. Yes sir.

Q. Why do you measure from extreme outside lines?

A. I didn't; there is the center of the road line, the center of the white line.

Q. Well, haven't you got the extreme outside lines right there at the point where you are measuring?

A. No, sir.

Q. Turn it over now, put it across there—(illustrating)

Q. Go up there?

Q. Yes, put it there outside of that?

A. It is a pretty close proposition.

Q. You still think that it would actually touch the point, do you?

A. What is that?

Q. That is your idea is it, that it would, that the two lines would actually come together, the two pieces of land?

A. They would about come together, yes sir.

Q. About come together?

A. On that point

Redirect examination by Mr. HARKNESS:

Q. Mr. Baxter, you stated that on May 11th, 1896, you were somewhere I think about two miles below Hanging rock, I didn't hear the place distinctly?

A. No, sir; that date we were backed up; and were within about five miles of Provo.

Q. That wasn't when you were running your line?

A. No, sir.

Q. But when you was resurveying?

A. Yes sir.

Q. Now all these dates, June 20 and 26th were on the survey line of the change to the south side of the river.

A. Yes sir.

197 SAMUEL NORRIS, called and sworn for plaintiff:

Examined by Judge HARKNESS:

Q. Mr. Norris, what is your business?

A. Civil engineering.

Q. Did you work any in the Provo canyon in 1896?

A. Yes, sir, I worked from July first until about the first of September of '96.

Q. What did you work at beginning at July 1st, '96?

A. I was working one day with Mr. Baxter on a line on the south side of the river about Thayer's, just below the Hanging rock.

Q. Did you find a line run through on the south side?

A. Yes sir.

Q. What did you do on it?

A. I worked under Mr. Baxter's directions for three or four days, and he took his party on up through the canyon, and left me there to work on the construction, to carry on the changes he had planned.

Q. Then you was assisting in construction?

A. Yes sir.

Q. And also working part of the time, do I understand, on this line?

A. Yes sir.

Q. Where were the graders then?

A. They were above the Hanging rock.

Q. On which side?

A. The first of July they were on the north side.

Q. When did they move there?

A. About July the 11th.

Q. The 11th; now from July 1st to July 11th, you did some work with those construction men?

A. Yes sir.

Q. Did you also go through and re-examine the line on the south side?

A. Yes sir.

Q. The changes line, I mean?

A. Yes sir.

Q. How long did that take you?

A. Well, I was working there all summer, between—on the whole change.

Q. Well, I am speaking especially of this change of four miles and over from below Hanging rock to where that goes above the Ferguson land?

A. Yes sir; I was working on that all the time I was up there.

198 Q. With the construction party?

A. Yes sir.

Q. Didn't you work any above or below the change on the line?

A. Yes, I worked on that change from the west end of that change down to very nearly down to Provo.

Q. How, let me begin at the west end of that change and go northeasterly to where it struck the old line again; you say you found a line run there?

A. Yes sir.

Q. What change if any did you make within that distance?

A. Well, we didn't make any great changes; just on the spirrels and moved the line a few feet up and down hill as we thought was needed to lighten the work.

Q. Only amounted to a few feet?

A. Yes sir.

Q. Then from below that point you worked clear back to near Provo, or worked back in this direction?

A. Yes sir.

Q. What changes if any did you make in that part of the line?

A. Nothing but a very few feet; not over from three to four feet or less up to 25, something like that.

Mr. HENDERSON: I don't just see the object of this, Judge, the work done below that?

Mr. HARKNESS:

Q. Were those changes continuous or only at curves and places?

A. Well, we restationed the line where we made these changes, making a slight difference in the line, we had to carry the stations on down, to keep continuous measurement.

Q. Well, did you change the measurement any on this Ferguson land?

A. No sir, not to amount to anything.

Cross-examination by Judge HENDERSON:

Q. There was no change made then on the Ferguson land from the stakes that you found set?

A. They were making the change when I went to work there with Mr. Baxter.

Q. Mr. Baxter was making a change to the north side of
199 the river—to the south side of the river?

A. He had already run one line on the change.

Q. He had already run one line, and was correcting that?

A. Yes sir.

Q. Now, it is true he commenced that on the 18th day of June isn't it?

A. I believe so; I wasn't there on the 18th day of June.

Q. That was the first time he had commenced on the south side of the river, wasn't it?

A. I wasn't there in June.

Q. Well you learned that, didn't you, right there and then?

A. Yes sir.

Q. Yes, and you went right over there and commenced work on the next day?

A. Why, the first thing I did was to cross-section the line where they did the construction work.

Q. You did what?

A. To cross-section the line where they did the construction work.

Q. You were simply setting stakes along the outside of the line?

A. Yes, sir.

Q. What you did was to follow along and stick stakes, and set stakes for the outside line?

A. Yes, sir at that point.

Q. Now, when was it you say the men went over and commenced work on the south side?

A. July the 11th I believe, or near that date.

Q. July 11th?

A. Yes sir.

Q. Where did they go from?

A. From the north side of the river.

Q. From the north side?

A. Yes sir.

Q. And which way, up or down the canyon had they been at work?

A. Well it was just right opposite.

Q. It was right opposite?

A. Yes sir.

Q. That is to say, where they was at work up to June 11th was on the line that was on the north side of the river?

200 A. Did you say June the 11th?

Q. July the 11th?

A. Yes sir.

Q. Up to that time they were working grading on the line that ran on the north side of the river?

A. Yes sir.

Q. And on the 11th day of July they changed this work over from the north side of the river to the south side?

A. Yes sir.

Q. And thereby abandoned the north side?

A. Yes sir.

Q. That place where they was at work immediately previous to the 11th day of July would be a part of the road that would be abandoned, if they took the south side?

A. Yes sir.

Q. Yes; that was the first work that was done over there, wasn't it in the way of abandoning the one line and commencing on the other?

A. It was the first; well, that was the final work, I suppose.

Q. The final work; why it wasn't the final work was it of that railroad; that was the first work wasn't it, that was done, actually done by way of abandoning the line on the north side and going to the line on the south side?

No response.

Q. Maybe you don't understand it. Up to the 11th day of July these men had been grading on the north side?

A. Yes sir.

Q. Do you remember the day of the week the 11th came on; it wasn't Monday was it?

A. I believe the 4th was on Saturday, and then it would come on Saturday again.

Q. That would make the 11th come on Saturday again? Well, if it wasn't Sunday, the day before, they had been at work there the day before, hadn't they, right on the north side?

A. Yes sir.

Q. Actually at work constructing the——

A. Yes sir.

Q. Line on the north side?

A. Yes sir.

Q. And on the morning of the 11th that was abandoned?

A. Yes sir.

Q. And this work over there was commenced?

A. Yes sir.

Q. Do you know—up to that time they had been prosecuting the building on the north side, hadn't they?

A. Yes sir.

201 Q. And from that time on they didn't prosecute that any further?

A. No sir.

Q. You was at work there, was you, for some time after that?

A. Yes sir.

Q. You commenced, did you say you commenced on the first of July?

A. Yes sir.

Q. That was the first you commenced for the company?

A. No sir.

Q. What had you been doing before the first of July?

A. I had been working down in Sevier canyon, on the Sevier Valley branch.

Q. Well, but I mean in this work up here?

A. That was my first work in Provo canyon.

Q. Yes; and when you commenced on the 4th, what did you commence doing?

A. Why, I ran a level, run the instrument.

Q. Run level; did you have any charge of the workmen, that gang of graders?

A. Not until about the 5th or 6th.

Q. 5th or 6th; from the 5th or 6th you had charge of that gang of graders, did you not?

A. Yes sir.

Q. And you was directing their work from day to day?

A. Yes sir.

Q. And you was doing that—were you under the directions of the company?

A. Yes sir.

Q. And as you was directed?

A. Yes sir.

Q. And up to the 10th to and including the 10th of July you was working those workmen under the direction of the company constructing that road on the north side?

A. Yes sir.

Q. And from that time you commenced working them on the south side?

A. Yes sir.

Q. Yes; and the day, or about the day that you went on the north side did you have any difficulty with anybody there on the north side?

A. No sir.

Q. How?

A. No sir.

Q. Was there anybody there that objected to your doing work there?

A. At that date?

202 Q. Well that date or a day or two before?

A. No sir.

Q. Do you know Mr. Cramer?

A. Yes sir.

Q. Well, did you have any talk with him about that?

A. No sir.

Q. Didn't he say anything to you about prosecuting that work?

A. No sir.

Q. Did you have any talk with him on the subject?

A. Not at that time.

Q. Well, at what time did you?

A. About August 2nd, I believe, as near as I can remember now. I had the dates——

Q. About August the 2nd?

A. I believe so.

Q. Was that after you had crossed over to the south side?

A. Yes sir.

Q. And while you were prosecuting the work on the south side?

A. Yes sir.

Q. Well, did you quit work right away after that talk with Cramer?

A. No sir.

Q. Wasn't that work that you had the talk with Cramer about on the north side?

A. No sir.

Q. Well, did you testify before in this case?

A. Yes sir.

Q. Did you testify then in relation to that?

A. Not to the work on the north side.

Q. Well, did you testify about this?

A. Yes sir.

Q. You had some words with Cramer, didn't you?

A. No, I don't know as they were words; just told me to stop.

Q. Well, wasn't that words?

A. Yes that was words.

Q. Yes.

A. Yes sir.
Q. He told you to stop?
A. Yes sir.
Q. Did you stop?
A. Yes sir.
Q. Well, I understood you a few minutes ago that you said you didn't stop when you had that talk with Cramer?
203 A. Yes; but I understood you to ask me if it was concerning the work on the north side.
Q. Well, I asked you after that; you misunderstood me——
A. Well, I misunderstood you.
Q. Did you stop the work after that talk with Cramer?
A. Yes, sir; that is at the point where the question was raised.
Q. Well, at that point; where was that point?
A. That was on a channel change; it was on the north side of the river.
Q. On the north side of the river?
A. Yes sir.
Q. Well that is just what I was asking you about, that same thing, and you said it was on the south side?
A. It was connected with the work on the south side.
Q. It was connected with the work on the south side, but it was above the work on the north side of the river; at what point was it?
A. It was just above the Hanging rock.
Q. Just above Hanging rock?
A. Yes sir.
Q. And well, was that a part of the line that is connected with this south side of the river?
A. There was a channel change in connection with it.
Q. Oh, there was a channel change?
A. Yes sir.
Q. And that talk was in relation to the channel change?
A. Yes sir.
Q. And you say that talk was about the 11th of August?
A. Second of August.
Q. Second of August?
A. I believe, but I am not certain about the time at present, but I could possibly find out.
Q. Yes; now was that talk about making a change in the channel near the abutments of a dam that he was making?

Mr. HARKNESS: I do not think that is proper examination.
Mr. HENDERSON: I only call his attention to that for the purpose of identification.

204 A. I don't know whether it was or not; I didn't see them making any abutments.
Q. Well, I know, but did he say anything about that?
A. Yes, sir.
Q. That was the claim that he made about it?
A. Yes sir.

Q. Now, wasn't that before you had gone over on the south side and commenced work there?

A. No, sir.

Q. That you say was after?

A. Yes sir.

Q. Now, do you know Mr. Collier.

A. Yes sir.

Q. Is he here?

A. No, sir; I haven't see- him.

Q. Do you know where he is?

A. Salt Lake I believe.

Q. Did he do some work for the company there?

A. Yes sir.

Q. What kind of work?

A. Why he ran transit for Mr. Baxter before I went up there.

Q. Did he stay after you went there?

A. No sir.

Q. Quit when you went up?

A. Well, some time before, a short time before, I don't know just how long.

Q. And what do you say he was doing?

A. Running transit.

Q. Running transit; did he make any part of the survey of this line, to your knowledge?

A. Not to my knowledge.

Q. Not to your knowledge; do you know anything about whether he did or not as a matter of fact?

A. Well, I naturally suppose he would, being instrument man. If Mr. Baxter had to go away why he would be the man that was in charge.

Q. But he didn't stay there any after you commenced?

A. No sir.

Q. So that you don't know anything about his work at all?

A. No sir.

Redirect examination by Mr. HARKNESS:

Q. Mr. Norris, how does the elevation of the survey for the line on the south side compare with the elevation on the north side where the change was made?

205 Mr. HENDERSON: I object to that as immaterial. I don't see what that has to do with it.

The COURT: Read the question, Mr. Reporter.

Question read.

Mr. HARKNESS: I propose to show, if it please the court, that in changing over on the south side they didn't go over their track any, nor go off the same Government subdivision, or the same man's land, but that the grade and elevation are the same. Couldn't injure anybody on one side any more than the other.

Argued to the court by Mr. Henderson.

The COURT: Answer the question.

Mr. HENDERSON: Give us an exception.

A. Why, to the best of my remembrance the grade line was somewhat higher.

Mr. HARKNESS:

Q. On the south side?
A. On the south side.
Q. About how much?
A. Well, I couldn't say; I don't believe it is less than six feet; still I don't know.
Q. That is the track, the line as first surveyed on the north side would be lower than the one on the south side by you would think six feet?
A. Yes, sir.
Q. And both lines were graduated so that there would be an average would it?
A. I don't quite understand your question.
Q. Well, would there be any point south of the river where it would be as low or lower than the line on the north side of the river?
A. No sir; it would not be any lower.

Recross-examination by Judge HENDERSON:

Q. You say it is about six feet higher on the south side?
A. That is what I believe; I don't know that it is six feet; I know it is higher.
Q. That is your judgment?
A. Yes sir.
206 Q. Do you know anything about whether that is on a true grade along there or whether it is on a grade, and if so how much of a grade, that point from the Hanging rock up for some distance?
A. To the best of my remembrance it is a $\frac{12}{100}$ths grade; $\frac{12}{100}$ths of one per cent.
Q. $\frac{12}{100}$ths of one per cent.?
A. Yes sir; for some distance up.
Q. That is, it is a little over one-tenth of one per cent.?
A. Yes.
Q. And about how was it on the other side?
A. Well, from way down for a about a thousand feet, I believe it was about $\frac{5}{10}$ths per cent., and then something——
Q. (Int.) From what do you mean by the dam?
A. Or from the Hanging rock.
Q. From Hanging rock down the canyon for about a half a mile?
A. No, for about a thousand feet.
Q. About a thousand feet?
A. And then it is something over a one, or near a one, I don't know just what it is.
Q. For a half a mile?
A. Yes.

Q. That is to say, going a half a mile down the canyon from Hanging rock, the grade for a distance would be about one per cent.?

A. Yes sir.

Q. And then it would be about $\frac{5}{10}$ths did you say?

A. No, it is $\frac{5}{10}$ths from the first thousand feet from the Hanging rock.

Q. $\frac{5}{10}$ths of one per cent.?

A. Yes, sir; and then from there down——

Q. Well, that would be one-half of one per cent.

A. Yes sir.

Q. And from there down it is pretty near or about one?

A. Yes sir.

Q. Now, I am asking you about the two; suppose the survey on the north side—in the first place I will ask you that, what
207 would have been the grade by the old survey that was abandoned on the north side?

A. Well, I didn't have any connection with the line on the north side from the Hanging rock down.

Q. No, no, well, the Hanging rock down, I mean up there where you changed over to the south side; where was it that you changed over to the south side?

A. At a point about two and a quarter miles below the Hanging rock.

Q. Below the Hanging rock?

A. Yes sir.

Q. Now, you have stated that the grade on the south side was about six feet higher than it was on the north side?

A. Yes sir.

Q. Now, I want to ask you, and I have asked you this, what the grade was, what per cent. of grade there was running along the track, and you have said it was $\frac{12}{10}$ths of one per cent.; that was on the south side; now what was it on the abandoned road on the north side?

A. Why, I don't know just what it was; I don't remember; but it would not be very much heavier.

Q. Not very much difference?

A. No sir.

Q. Well, do you mean that it was six feet higher right at the place where they crossed the river on the south side?

A. At the place they crossed the river?

Q. Yes, right at the place they changed?

A. No sir, it would be about the same.

Q. About the same?

A. Yes sir.

Q. Well, now, what part of the line was six feet higher of the changed line?

A. Why the part from Hanging rock up towards the South fork, it would gradually get less until it became nothing?

Q. Now, on the south side, the fact is when you ran over there they ran the road a little up the hill, didn't they?

A. Yes sir.

Q. Yes; that was thought to be the better line, instead of running it down on the flat, was to go up and run it along the side hill a little ways, up?

208 A. I don't know as that was the object.

Q. Well, what was the object?

A. Mr. Baxter told me he wanted me to keep up high enough, below there, below the dam, that they had excavated for, below the Hanging rock, and he wanted to give them a water-way enough, or something like that, he told me.

Q. Above Hanging rock?

A. Below Hanging rock.

Q. Below Hanging rock; well now, I am calling your attention to a place above Hanging rock; that is the place I am calling your attention to?

A. Well, I am stating that he kept up on that account; he didn't keep on the side hill on account of wanting to go up there.

Q. No, he told you he wanted to go up there for a purpose; now that is above Hanging rock?

A. Well, yes, sir.

Q. Who was it that told you this?

A. Mr. Baxter.

Q. Mr. Baxter, he told you that he was running along up there on that side hill for the purpose of giving them a change to use and operate their dam?

A. He didn't use those words; he just said he thought he would raise his grade high enough to get up high enough at the point, so that they wouldn't have any objections.

Q. Yes?

A. At that particular point.

Q. Well, that was the point; he was trying to fix that so they wouldn't have any objections?

A. For this lower dam yes sir.

Q. That is the way you understood it?

A. Yes sir.

Q. For this lower dam?

A. Yes sir.

Q. Well, but I mean the dam at Hanging rock. I was talking about that; I have called your attention to this a half a dozen times.

Mr. HARKNESS: Well, there was no dam there, and never has been.

Mr. HENDERSON: I know there isn't any dam there; but was anything said about a dam there at Hanging rock, or anything about it?

A. No sir.

Q. Nothing said about it?

A. No sir.

209 Q. Well then, it wasn't raised at Hanging rock for the purpose of giving a dam?

A. No sir.

Q. And how high above the surface of the stream was the line on the south side at Hanging rock?
A. I should judge about fourteen feet; something like that, to the best of my remembrance.
Q. About fourteen feet?
A. Yes, sir.
Q. Above the face of the stream, the surface of the water?
A. Yes sir.
Q. And at that point it is a little higher up the hillside?
A. Yes sir.
Q. And it would be built along the hill side, and it is for quite a long distance above there isn't it?
A. Yes sir.

L. L. ZULICK, called and sworn for plaintiff.

Examined by Mr. HARKNESS:

Q. Mr. Zulick, what is your business?
A. Civil engineering; draftsman.
Q. What was you doing in 1896?
A. I was working for the Rio Grande Western.
Q. Where?
A. In the office, at Salt Lake.
Q. You know about some surveys in Provo canyon, I suppose?
A. Yes sir.
Q. Were Mr. Baxter's notes turned over to you?
A. Yes sir.
Q. Did you map them?
A. Yes sir.
Q. Will you look at this blue print and these maps here and see whether they are your work?
A. Yes sir; it is.
Q. Just look at that larger one too; you may state whether or not those maps are correctly drawn from the notes turned over to you?
A. Yes sir; they are copied from the notes.
Q. Have you examined the map in the land office?
A. Yes sir.
Q. Made a copy of it or compared it so that you can say whether that is the copy?
210 A. There were three maps made at the time, three tracings like this, and this was one of them, and two were filed with the United States land office in Salt Lake.
Mr. HENDERSON: Well, just a moment; what is the object of this; I don't understand.
Mr. HARKNESS: To substitute a copy instead of the original.
Mr. HENDERSON: That is all right.

Mr. HARKNESS:

Q. Go on?
A. After we had been notified that the copy of twenty miles had been approved in Washington——

Mr. HENDERSON: Just a moment. Read that (answer read) I move to strike that out.

Mr. HARKNESS: Strike it out; state whether or not you found the map, the original, of which this is a copy in the land office?

A. The original is in the land office.

Q. Is that a true copy of it?

A. Yes sir.

Q. With the approval, etc., dates and everything?

A. Yes sir.

Q. And this blue print, you say this small blue print, of which a copy of it is attached to the complaint——

A. Yes sir.

Q. You say that is also correctly produced from the notes of Baxter?

A. Yes sir.

Cross-examination by Mr. HENDERSON:

Q. Do you say you made the original of that?

A. Yes.

Q. You made the one that you have been testifying about, that was filed in the land office?

A. Yes sir.

Q. When did you make it?

A. The latter part of 1896.

Q. What is that?

A. In December, '96.

Q. In December '96 was when it was made?

A. This was an amended plat.

211 Q. I didn't ask you to tell us what it is; you made a map that you have been talking about, that you copied in the land office, and of which — is a tracing, in December, 1896?

A. Yes sir.

Q. Now about this, when did you leave it in the land office?

A. How.

Q. When did you leave it in the land office?

A. I didn't take it there.

Q. You didn't take it there?

A. No.

Q. Do you know when it was left there?

Mr. BAILEY: It shows the date of the filing of the map.

Mr. HENDERSON: Anyway, it was made in December, 1896.

A. This one yes.

Q. Now about that blue print, you say that you made that correctly from those dates?

—. Mr. Baxter's.

Q. Where are they?

A. They are here.

Q. Are those the ones?

A. Yes sir.

Q. Just pick out the books and tell me which ones they are that you made that map from?
A. In this book here.
Q. How is that?
A. This is the book
Q. This is the one; now, it was from that book that it was made?
A. Yes, and some of it appears in here also.
Q. Well is it made from both of those books?
A. Possibly; this is the book that represented the final notes that are shown on that blue print.
Q. These are the ones?
A. Yes sir.
Q. That was the final notes on that blue print. (Addressing reporter) I want you to mark that book as the one identified by him as the one from which that blue print was made.
Q. That is correct, is it?
A. Yes.

Book marked "Def'ts' Ex. 2 D. H. R."

Mr. HARKNESS: What are the dates on that?
A. July 8th, is all I find here, and above "1896"

212 Mr. HENDERSON:

Q. Have you got the map that shows the road as it was laid out on the north side?
A. Yes sir.
Q. Where is it?
A. Salt Lake.
Q. In Salt Lake?
A. Yes.
Q. Is that the one that Judge Harkness spoke of this morning?
A. Yes sir.
Q. Well, that is the one you have sent for isn't it?
A. Well, I was going up to get it, but I don't think I will get there.
Q. Well, that is the one you are going for?
A. Yes sir.

Redirect examination by Mr. HARKNESS:

Q. Mr. Zulick, is that the first map you made of that?
A. No sir.
Q. What?
A. No sir.
Q. When did you make the first one?
A. I don't remember the date, but I think it was in May, 1896.
Q. I understood you that you made three, when did you make the second?
A. Some time during the summer; I don't remember the date.
Q. And this was made in December, later?
A. Yes.

Q. Do you know whether the others were filed in the land office or not?

A. Yes, sir; they were filed, yes, sir; that is, one of the maps was filed twice; that is the way the three comes.

Mr. HENDERSON:

Q. Now Mr. Zulick, you have spoken of three maps and you have said that one of them was filed twice, that is correct is it?

A. There are two maps.

Q. Yes, there are two maps?

A. Yes.

Q. And only two?

A. Yes.

Q. And one of them was filed twice, and that is the way you came to say there were three?

A. Judge Harkness said there were three, yes.

213 Mr. BROWN: Well that is the fact.

Mr. HENDERSON:

Q. What did you say?

A. Yes.

Mr. HARKNESS: I am not testifying.

A. There were three filings made.

Mr. HARKNESS:

Q. There were three filings made?

A. Yes, sir.

Q. And so far as you know, testifying from your own knowledge, there were two maps?

A. Yes sir.

Q. And one of them was made in May?

A. Yes sir.

Q. And that was filed and then afterwards this one was made and filed; is this the one that you understood was filed twice?

A. No, the first one.

Q. The first one?

A. Because it was returned from Washington.

Q. Yes; now the other one of course that wasn't this map?

A. No.

Q. No; it was another map?

A. Yes sir.

Q. And that was the line on the north side?

A. Yes sir.

Q. Yes, that was the fact?

A. Yes.

Q. And that was the only map up to the time this map was made?

A. Yes sir.

Q. You was the man that did the drafting?

A. Yes sir.

Q. When field-work had been done and when the profile-work

had been done and all that was returned to you, then it came to your office, and you put it in the shape of maps?

A. Yes.

Q. And that was your part of the work?

A. Yes.

Q. And you did that kind of work during that summer that was done by the company?

A. Yes sir.

That's all.

Mr. HARKNESS: Well we offer those maps.

214 Mr. HENDERSON:

Q. Mr. Zulick, just one further question; this blue print simply shows a small section, does it not, of this large one?

A. Yes sir.

Q. And it was made for that purpose, was it?

A. Yes sir.

Q. It simply puts on a larger scale the section, including the lands in controversy here that were on this map?

A. Yes sir.

Q. That of course was not made until after this map was made?

A. I think this was made before. Yes: this was made in September.

Q. That was made in September?

A. Yes.

Q. Well, it was drafted before this one, do you say?

A. Yes, sir.

Q. Well, that was made in September, '96?

A. Yes, sir.

Q. And it is the same thing as this?

A. Yes sir; the notes were in the office before that time.

Mr. HENDERSON: Now the maps are offered I suppose?

Mr. HARKNESS: Yes.

Mr. HENDERSON: We object to it, if the court please; we object to this large map because the testimony shows that it was a map which was made since the suit was commenced; and it not only pertains to matters since this controversy arose, but the map itself was actually made since the suit was commenced; and we would say that it proves nothing. This one we object to for the same reason; object to both of them for the reason that they are immaterial; object to the large one especially for the reason that it is a map that has been made and constructed entirely since this suit was commenced, and for the further reason that it doesn't tend to show—there is no issue in the case so far that this company has ever in any way adopted this line.

Argued to the court at length by respective counsel.

215 Blue print marked by reporter "Pl'ff's Ex. 4 D. H. R.," and map marked Pl'ff's Ex. 5 D. H. R.)

The COURT: As illustrating the surveys that were made there I think that the map should be admitted; so far as it applies to the

right of the company with regard to the Government I don't know that that is a point before the court now anyhow, the question: let it be admitted.

Mr. BROWN: We take an exception to the admission of it, and to each of the reasons.

Mr. HENDERSON: I understand that the court don't decide now that it is admissible for the purpose of showing a compliance?

The COURT: That is it.

Mr. HENDERSON: But it is admissible as showing a compilation of the field-notes.

The COURT: A compilation of the field-notes.

Mr. HARKNESS: The map attached to the complaint is admissible, I suppose?

Mr. HENDERSON: Well, for the purpose of showing where the land is, that is all right enough, and if it is offered for that there will be no objection.

Mr. HARKNESS: We offer a copy of the resolution of the board of directors of the railway company, June 29th, approving the route of survey.

Mr. HENDERSON: We have no objection to that.

Marked "Pl'ff's Ex. 6, D. H. R."

B. F. MILNER, called and sworn for plaintiff, examined by Mr. Wedgwood:

Q. Mr. Milner, where do you reside?

A. Provo.

Q. How long have you lived here?

A. About a year and a half.

Q. Where have you resided prior to that time?

A. In Provo valley.

216 Q. Where is Provo valley?

A. It is at the head of Provo canyon.

Q. Up Provo canyon?

A. Yes sir.

Q. How far from Provo?

A. Twenty miles, to where I lived.

Q. How long have you been acquainted with Provo canyon?

A. Well, ever since I can remember.

Q. About how many years since you have reached the age of discretion?

A. About twenty-five or 30 years.

Q. Now when, you lived in Provo valley did you have occasion to travel up and down the canyon?

A. Yes sir, do still.

Q. Often?

A. Yes sir.

Q. Are you acquainted with the lands in the canyon?

A. Yes sir.

Q. All of them?

A. Yes sir.

Q. Their general character?
A. Yes sir.
Q. I will ask you if you know the place commonly termed Ferguson's ranch?
A. Yes sir.
Q. You know the character of the hills and the low ground?
A. Yes sir.
Q. I will ask you to look at this map (Pl'ff's Ex. 4) Mr. Milner, this being the Provo river flowing down this way, here?
A. Yes.
Q. This being the South fork coming in here; now I will ask you, take what time you want to look that over and look it over carefully, so as to get the location.
A. This is the river here, this red?
Q. Yes locate the natural objects that you know there in your mind and the ground in the first instance?
A. Yes, I know that.
Q. This is the wagon road up there; I will ask you if you recognize that as the Ferguson ranch?
A. I do.
Q. Now, I will ask you in September, 1896, if you were familiar with that ground?
A. Yes sir.
Q. Passing and repassing there several times a week?
217 A. From twice to three times.
Q. And you know the improvements there were on that piece of ground?
A. Yes sir.
Q. What were they, commencing at the east end of the Ferguson ranch and coming west, the east end would be nearest Provo, as I understand?
A. The east end would be nearest Provo valley.
Q. Well, commencing at the west end, you are right.
A. There was a piece of ground grubbed and planted out to lucern-, and an orchard.
Q. How large a piece of luce-n- was there?
A. Well, I should judge there were five or six acres.
Q. And how much of orchard?
A. There was, well, probably a half.
Q. A half an acre?
A. Or three-quarters, might be.
Q. Now, what other improvements upon the soil there by way of cultivation on the Ferguson ranch?
A. Nothing that I know of.
Q. That was all the improvements to the soil?
A. Yes.
Q. And buildings, what was there on there?
A. There was a couple of barns and a house.
Q. Now, I will say to you that the center line between these two colored lines there is intended to represent the center line of the railroad track?

A. Yes.

Q. And the outside colored lines on each side of it to represent a line one hundred feet on each side from that center line; I will ask you to look at that and then testify in relation to the improvements, this lucern- patch and orchard, just look at it and place it in your mind?

A. Doesn't touch it.

Q. Doesn't touch it at all?

A. Not at all.

Q. Now look at that and see if you are familiar with the character of ground on that Ferguson ranch; that that two hundred feet represented between these two colored lines, crosses, goes across, commencing at the west end?

A. Yes sir.

218 Q. Now what is the character of the land that that 200 feet would cross, commencing at the west end, across the Ferguson land there?

Q. It would be land edgeways with the river until it run up to those hills where it crosses the river here.

Q. At the South fork?

A. Near the South fork, yes.

Q. Opposite the mouth of the South fork?

A. Yes sir; that would be river bed, and then there would be, right across the South fork——

Q. Opposite the South fork?

A. Yes.

Q. This is the South fork right here?

A. It crosses the South fork.

Q. You say it is on the other side of the river?

A. Yes, that is right; there would be a piece of land that could be cultivated.

Q. Well, what was the character of that piece of ground in September, 1896?

A. It was covered with cottonwood trees.

Q. Large or small?

A. Well, there — some that were nice poles.

Q. Nice poles?

A. Yes.

Q. Well now, going on above there, where it crosses the river again, what is the character of the ground?

A. Well, that is ground that is stuck up edgewise again.

Q. Now, Mr. Milner, are you acquainted with the value of land in that canyon?

A. Oh, some little.

Q. Acquainted with the value of the land above it?

A. Yes sir.

Q. That is, above the Ferguson land?

A. Yes sir.

Q. And below the Ferguson land?

A. Yes sir.

Q. I will ask you if that is the only piece of land that is tilled in that immediate vicinity?

A. Well, there is some tilled there about a mile or a mile and a half above it.

Q. And some two or three miles below it?

A. Yes.

219 Q. You say you know the value of the land through the canyon?

A. Well, approximately, yes.

Q. Now supposing a man owned the absolute title, that is the fee of the land, how much is that land worth per acre?

A. You mean this cultivated part?

Q. Within the colored part.

A. Oh, within the colored part.

Q. Yes.

A. Oh, I couldn't put it over seven to ten dollars.

Q. That is within that colored piece of ground 200 feet wide.

A. Yes sir.

Q. From seven to ten dollars?

A. Yes sir.

Q. Now I will ask you again Mr. Milner, in your best judgment, suppose a man was located upon that ground, having the absolute right thereto, the same as Ferguson was located, that is as regards improvements and buildings, in your best judgment what would be the damages to his possession by occupation of a right of way for a railroad 200 feet wide as laid out?

A. It would be practically nothing, because it is across the river beyond that, cut off from him.

Q. It would in no way interfere with any improvements that there were there?

A. No; these lines doesn't show any.

Q. Now, supposing the road was fenced on both sides, that is the right of way, within the colored lines was fenced on each side, would it be a detriment or a benefit to him?

A. Well, it would be a benefit for some reasons; they could put stock in and it would keep them back.

Q. Save him so much cost?

A. Yes.

220 Cross-examination by Mr. HENDERSON:

Q. Mr. Milner, you have judged of that purely and wholly and only for agricultural purposes, haven't you?

A. Yes, sir.

Q. That isn't an agricultural district up there is it?

A. Well there are agricultural spots there.

Q. Well, I understood you to say that the nearest place to it was about a mile that there was any agriculture?

A. Oh, I thought you were referring to the Ferguson property here.

Q. Well, I am referring to the Ferguson property and to that district up there.

A. Yes, oh yes, it isn't an agricultural district; that is right.
Q. It isn't an agricultural country, is it?
A. No, sir.
Q. It is very cold up in the canyon at that height isn't it?
A. No sir.
Q. Isn't it?
A. No, sir; not in there, no.
Q. How is that?
A. Not in there no.
Q. Isn't it very severe up there?
A. I don't think it is as bad as it is here.
Q. Don't think it freezes as thick as it does here?
A. Well, it might freeze as thick, but you don't feel it as bad.
Q. Well of course I don't know how a man would feel to be up there, but the actual temperature it is colder?
A. Well, there is a kind of a warm place in the canyon there.
Q. Yes, it is a sheltered place.
A. Yes.
Q. But the seasons there are shorter, aren't they?
A. Somewhat.
Q. Well, they are considerably; it is quite an elevation there?
A. Why yes.
Q. The seasons are very much shorter?
A. Yes, there is some difference.
Q. That is true, isn't it?
A. Yes sir.

Q. It is not agricultural land, is it?
221 A. Well, they raised some very nice fruit on the Ferguson property.
Q. Well, they raised some very nice fruit where?
A. On this Ferguson place.
Q. How much?
A. Well the trees are just getting in bearing, or had been when Mr. Ferguson was killed; I got some fruit from him that——
Q. (Int.) Well there isn't but just a very little strip along the bottom of the canyon that can be used?
A. That is all.
Q. Yes, just a little narrow strip that can be used for agricultural purposes at all?
A. That is all.
Q. And there isn't any other piece of agricultural land, is there?
A. Yes sir.
Q. There is a river runs through that land, isn't there?
A. Yes sir.
Q. That is the Provo river?
A. Yes sir.
Q. And you have seen it, been acquainted with it all your life, haven't you?
A. Yes sir.
Q. Do you know anything about—let me suppose, let me put a hypothetical question to you; suppose that the Ferguson land was

the only land upon which there was any claim of right as against the Government; suppose all the lands around it were unoccupied Government land upon which any person who wanted to start any enterprise for power would have a right as against the Government under the laws of the United States to appropriate the lands for that purpose, and raise the water for the purpose of creating head enough, and create storage, or creating power, so that by having a right in the bed of the stream and along the sides of it, at that place, he might raise a dam and might use these lands that would be overflowed by it, and thereby create power; do you know anything at all about how much such a right would be worth?

A. Why, I suppose it would — worth considerable, I don't know.

Q. Well, I know, we all suppose that?

A. Yes.

222 Q. But have you any accurate knowledge at all?

A. No, sir.

Q. About what such rights are worth?

A. No sir.

Q. You don't pretend to say anything about it, do you, Mr. Milner?

A. No sir.

Q. You only judge as to what it would be worth to that business which you have been carrying on all your life in this valley?

A. Yes sir.

Mr. WEDGWOOD:

Q. Your testimony is as to the value for the uses to which it is ordinarily put to?

A. Yes sir.

Mr. HENDERSON: How long did Ferguson live there, when did he go there, if you know?

A. I think he was there about eight years.

Q. About eight years?

A. I ain't very positive.

Q. Well, now, let me see, do you mean eight years before his death?

A. Yes.

Q. And when did he die?

A. He died a year ago last February.

Q. Yes, a year ago; it has been now about nine years since he went there?

A. Something like that.

Q. About '89; and you know he lived there from that time on up to the time of his death?

A. Yes; I was through——

Q. (Int.) You don't know anything about the rights as between him and the Telluride Power Company, I suppose?

A. Why, all I know is what he told me.

Q. Well, you only know that he did have some arrangements?

A. Yes.

Q. About that?

A. Yes.

223 T. E. THURMAN called and sworn for the plaintiff.

Examined by Mr. WEDGWOOD:

Q. Mr. Thurman where do you live?
A. Provo.
Q. How long have you lived there?
A. Since '52.
Q. Are you familiar with Provo canyon?
A. Yes sir.
Q. With the whole length of it?
A. Yes sir.
Q. Been up through there I suppose frequently?
A. Yes sir.
Q. And familiar with the lands lying in the canyon?
A. Yes sir.
Q. And their character?
A. Yes sir.
Q. Are you familiar with what is called the Ferguson ranch?
A. Yes sir.
Q. And have been for a number of years?
A. Yes.
Q. I will ask you to look at this map, Mr. Thurman; this is the river, the map of the river, between these lines, and this is the South fork?
A. Yes sir.
Q. Now, I will ask you to look at that and see if you recognize that piece of ground?
A. Yes sir, I recognize the Ferguson——

Mr. HENDERSON: There is no question about the identity Mr. Wedgwood.

Mr. WEDGWOOD:

Q. Now, I will ask you to describe the Ferguson ranch, if you can, as it existed in September, 1896, what it consisted of in the line of improvements upon the soil?
A. On the north side of the river he had a piece of ground fenced and improved; some lucern- in; some trees; had a house there and a barn.
Q. About how large a piece of lucern-?
A. Oh from three to five acres; something like that.
Q. How large an orchard?
A. Well, not to exceed two acres, I guess.
Q. Now, was there any other improvements on the soil,
224 that is in the line of cultivation?
A. Nothing only a fence around it.
Q. Was that fence all on the north side of the river?
A. All on the north side.
Q. And his houses which side of that cultivated field would they lay?
A. Right on the north side.

Q. They laid at the north side?

A. Yes sir.

Q. Now, these colored lines, the middle one of the colored lines represents the center line of the railway?

A. Yes sir.

Q. And each outside colored line represents a line 100 feet from the center line of that railway track, parallel to it; I will ask you to look at that and see if you know the character of soil, ground, and topography of the country through which that 200 feet passes on that ranch?

A. Yes sir.

Q. Commencing at the east end, you may briefly describe it?

A. The east end?

Q. The west end?

A. The west end; well, from the west end running up the canyon until it strikes the river, it is a side hill covered with brush and rock, right close to the river, and quite steep.

Q. Is it land that could be used or cultivated?

A. No, sir; it couldn't.

Q. Then where it crosses down to opposite the mouth of the South fork what is the character?

A. That is river bed and gravel, gravelly bottom; not tillable soil.

Q. Well, proceeding still further, after it crosses the river above the South fork?

A. There is a flat there of timber ground, covered with cottonwoods and black willow, and birch.

Q. And after it crosses the river again?

A. And then after it crosses the river again it is the same character as this first here.

225 Q. Rocky hillside?

A. Rocky hillside.

Q. Are you acquainted with the value of land in the canyon, both the upland and on this side?

A. Yes sir.

Q. Suppose a man owned the absolute title in fee of these premises, what would be the value in your judgment of the land embraced within those colored lines, the 200 feet that you have described here; take it on an average the whole land within that?

A. Oh, it would not exceed from eight to ten dollars an acre.

Q. Now from your knowledge of this Ferguson place that you have just testified to, if a man was occupying unsurveyed Government land under possessory right, supposing a railway was run through that ground as designated on that map, what in your judgment would be the damages to his possession that he would sustain by reason of that?

A. I don't think it would damage him any.

Q. Now suppose there was a fence built on each side of the proposed railway track by the railway itself, would it be a damage or a benefit?

—. That would be a benefit for agricultural purposes.

Cross-examination by Mr. HENDERSON:

Q. By what standard have you judged the value of that land?
A. From the general market value of land that is tilled for agricultural purposes.
Q. Yes, it is for agricultural purposes?
A. Yes sir.
Q. It is for nothing else?
A. No sir.
Q. And you have judged that as you judge any other land?
A. Yes sir.
Q. By the use that you have in your mind that would be made of it?
A. Yes sir.
226 Q. And that is agricultural use?
A. Yes sir.
Q. Land is of just such value to its owner as he can make profit of it by its use?
A. Yes sir.
Q. And if it is agricultural use why that is one standard?
A. Yes sir.
Q. And if it is any other kind of use, you recognize that it would be another standard?
A. Yes sir.
Q. If there was a railroad run up and down through that canyon, and it was the only pass for a hundred miles where they could get through those mountains, and Utah county should undertake to locate court-house right across the bottom of the canyon, taking up about fifteen or twenty rods in length would you regard the use of the railroad company to that land and its value from an agricultural standpoint entirely.
A. I don't think so.
Q. How is that?
A. I don't think so.
Q. Now, you wouldn't regard the few rods of realty that was occupied by that track there as being the value in it to the railroad company, would you?
A. No sir.
Q. It would be because it would take from them the only pass there was through these mountains for a hundred miles?
A. Yes.
Q. And that is the value you put upon it would you?
A. Yes sir.
Q. Suppose that you were in the canyon up there, and had settled on a piece of land, made an entry on it, or had settled on it, being unsurveyed lands, couldn't make any entry, and you had done that for the purpose of getting an absolute title to that piece, and that it was surrounded by unoccupied, unsurveyed Government land, and you had done that for the purpose of raising a dam and of using and utilizing the water power which is there by nature on that stream, and you knew that you could acquire and have the right to

raise it, and to flow the unoccupied lands of the United States,
227 that the act of Congress gave that right, and you was doing that for the purpose of starting up some milling business up there, and had located it for that purpose, and somebody wanted to locate a railroad through it, and locate it so low down the canyon that it would destroy your enterprise, and he should come to you and ask the price, you would fix the price that you thought your enterprise was worth to you, wouldn't you?

A. Yes sir.

Q. You wouldn't judge it by the cabbages you could raise on it?

A. No sir.

Q. Nor the lucern- you had on there?

A. No sir.

Q. You would consider that the land was worth to you just what your enterprise would be worth to you?

A. Yes sir.

Q. Because you would feel that the enterprise was destroyed?

A. Yes.

Q. In the estimate that you have given you have put a purely agricultural standard upon that land?

A. Yes sir.

Mr. WEDGWOOD:

Q. Your estimate is as the land exists for any available purpose for which land is used up and down the canyon?

A. Yes sir; for what it has been used for.

Mr. HENDERSON:

Q. Has water power never been used, in that canyon?

A. Not that I know of.

Mr. WEDGWOOD:

Q. There has been none?

A. No sir.

Mr. HENDERSON: How is that?

Mr. WEDGWOOD: There has been none.

Mr. HENDERSON:

Q. Isn't there now?

A. There is now; just lately.

Q. It is entirely feasible that it can be, ain't it?

A. Yes sir.

Q. Were you acquainted with this land in the summer of 1896?

A. Yes sir.

Q. Didn't you know, and don't you know as a matter of fact that L. L. Nunn of the Telluride Power Transmission Company was there that summer making surveys, building improvements and setting stakes for the establishment of water power in that canyon?

228 A. I knew there was somebody to work there, I didn't know who.

Q. Well, you knew somebody was there doing that kind of work?
A. Yes sir.
Mr. WEDGWOOD: Do you know anything about where they were?
A. They was below there to work; below the Ferguson place.

Mr. HENDERSON:

Q. Don't you know that they were setting their stakes above Hanging rock, a continuous thing?
A. I saw some surveyors way above, about Deer creek several times.
Q. Above where?
A. Up the canyon about Deer creek; that is about a mile or two miles.
Q. Don't you know at Hanging rock that there was a line of reservoir set out by stakes along there?
A. No sir, I don't know that.
Q. You don't know that?
A. No.
Q. You were up there during the latter part of that summer?
A. Well some time in July or August I camped there a week.
Q. Where?
A. Right there on the Ferguson place.
Q. I am not talking about the Ferguson place.
Mr. WEDGWOOD: You asked him where he camped.
Mr. HENDERSON: Well, I say that I am not talking about the Ferguson place; I am talking about the Hanging rock, and the land just above that.
A. Well, I saw some teams to work on a grade.
Q. A grade of what?
A. Railroad grade.
Q. I am asking you if you didn't see a line of posts set up around there; didn't know that was a line of posts set up around there, showing the survey of the countour line of a reservoir?
A. I seen some stakes set from there up on the side hill clear up as high as Deer creek; that is in the canyon.
Q. Where is Deer creek; I don't know where that is?
A. It is about four miles up the canyon from there.
229 Q. Well, didn't you see them along down from there down to Hanging rock, all the way down?
A. Yes sir.
Q. Well, now, I ask you that, if you didn't see them down to Hanging rock?
A. Yes sir.
Q. And it was plainly, the row of stakes plainly showed a contour mark didn't they?
A. Yes.
Q. They indicated beyond a reasonable doubt a water level there, didn't they?
A. Well, I didn't know what they was for. I saw the stakes there.
Q. Well, didn't it appear to you as you looked at it, you could

tell whether they seemed to be set along in a way—they seemed to be level along the side hill?

A. Well, it looked like it *looked like it* would make quite a lake if they got that high up.

Q. Well, didn't you know, didn't you understand at that time what they were?

A. Well, I had heard.

Q. Yes, well there is no secret about that. Let's see you are a relative of the last witness, are you not?

A. Yes sir.

Q. And what relation?

A. A half-brother.

Q. You are a half-brother of the last witness?

A. Yes sir.

Mr. WEDGWOOD:

Q. Mr. Thurman, did you see any stakes on the south side of the river up on the hill?

A. No sir.

Q. Then you didn't see a great big contour line around there?

A. No sir; I just saw some of the stakes.

Q. You saw some stakes up on the hillside?

A. Yes sir.

Q. Just stakes on the ground there?

A. Yes sir.

Q. And what work you saw being done was down the river below the Ferguson place?

A. Yes sir.

Q. That was in the nature of preparing to build a flume, or building it?

A. Yes a cut.

230 The COURT: Who is your next?

Mr. HARKNESS: I believe we can take the statement of J. L. Thompson, superintendent of buildings and bridges, as to the costs of fence; he has given a detailed statement at $304.60 per mile as the cost of fencing; that the cost of a single cattle-guard is $42.50; of two cattle-guards $85.06, and Senator Brown, after he gave me this statement in your presence, he made this qualification, that this is the average cost of fence; he said that if it was rocky ground and the posts had to be set in rock it would cost a little more.

Mr. BROWN: If they had to be shot in?

Mr. HARKNESS: That was his statement.

Mr. HENDERSON: It is agreed that——

The COURT (int.): The court understands that this is an estimate made by some witness who is absent.

Mr. HENDERSON: Yes, that this witness if he was present would testify that that was the average cost, and if it was rocky ground that the fence would cost a little more. Now, of course, I only take an objection that it is immaterial. I don't know what Judge Harkness offers it for.

Mr. HARKNESS: The statute requires it.

Mr. HENDERSON: How? The statute requires; but I will reserve an exception to it.

The COURT: Let the record so show.

Mr. HENDERSON: If the court please, I will make more specific and definite the objection that I made to it; it is that it is immaterial for the reason that their complaint shows, it is in the complaint that they understand that we need, that we want it, and that we are claiming it for power purposes, and for flowage purposes, and that they know that a fence built there under water, or a cattle-guard under water wouldn't be of any great use to us. If the fish
231 commissioner wanted to pay us anything for it it would be all right.

Mr. HARKNESS: I don't see the point of the objection. I cannot give a statement of how much it would cost to set posts a hundred feet high in water.

Mr. BAXTER, recalled for further cross-examination.

Examined by Mr. HENDERSON:

Q. You testified today that this map was made from notes of yours that you made?

A. Yes sir.

Q. I ask you if that book contains the notes, if those are notes from which that map was made, and I show the witness the book that is marked for identification as "Def'ts' Ex. 2, D. H. R."?

A. Yes sir.

Q. That is the book, is it?

A. Yes sir.

Q. Now, I want to call your attention to one or two things in this book; where is station 26 thousand eight hundred—tell me what station that is if you will?

A. 268 plus 65.7.

Q. Find where that station is?

A. About five miles from Provo.

Q. About five miles from Provo, up towards the canyon?

A. Yes sir.

Q. When was that; when were those, was the notes as to that station made, and I call your attention to that figure right there?

A. Made in November, '96.

Q. Made in November, '96?

A. Yes sir.

Q. The truth is then that that map was prepared part at least from surveys made in the field, and notes made in September, '96?

A. Well, this part of the map doesn't seem to be—isn't made from no particular notes; it wasn't from that notes that you called off.

Q. That part of the map?

A. Yes sir.

Q. Well, I understood you to say that the map——

232 A. I examined up above, and where I examined it in the canyon the notes and the map agree, but I see down here they don't agree.

Q. Well, there ain't any such difference in climate is there that it would make them disagree. What is the trouble about that?

A. Why these notes were made after this map was made.

Q. Well, the notes wasn't—the map wasn't made from the notes then,—the notes were made from the map?

A. In between here and the mouth of the canyon the map was not made from these notes.

Q. Well, was it above that?

A. Yes sir; as far as I have examined it. I didn't examine the entire line; but I feel quite sure they are; all of it.

Q. Well, how does it come that you were surveying this line between here and the mouth of the canyon in November, 1896?

A. We made a change in the line in November.

Q. Made a change?

A. Yes, sir.

Q. And is that change carried onto that map?

A. No, sir.

Q. The change isn't there at all; well, now, where is station 347; that is 347 isn't it, right there?

A. Yes sir.

Q. Just turn to that?

A. Well, I would have to have some point of curve or point of tangent in order to identify the notes; that is on a tangent, I can tell (illustrating).

Q. How is that?

A. I shall have to have the notes or some point of curve in order to identify the notes.

Q. Some point of curve; does this not show?

A. That is on a straight line; I can tell from that mark, P. C.——

Q. Can't you find where it is?

A. Yes, sir, I can find where it is, but it is on a straight line and might be on this map and might not; nothing to identify it where it is curving slightly, the station, without any number to identify the land.

233 Q. Well, can you tell me approximately?

A. Yes, sir; I can tell you where it is.

Q. Well, that is all I want; tell me where it is?

A. It is below the mouth of the canyon.

Q. It is below the mouth of the canyon, and I see the date opposite that, November 16, 1896?

A. Yes, sir; that is a part of the same change.

Q. It is a part of the same change; well, it is pretty close to the other one?

A. Yes, sir.

Q. Wasn't much difficulty in finding out where that was. Well, was the survey—is that carried into that map?

A. No sir.

Q. No, that is a change since, where is 548?

A. Right below Thayer's.
Q. Well, I ask you if that is 548?
A. Yes, sir; that is 548 there.
Q. That is the line between——
A. (Int.) These notes are crossed out on this page.
Q. They are crossed out? Who crossed them out?
A. They were crossed out under my direction probably.
Q. Well, probably; I am asking you if you know anything about it?
A. By the man who was running instrument at the time the work was done, I don't know who.
Q. Do you know anything about their being crossed out?
A. I know they are crossed out.
Q. Well, I see that; I see a cross there in pencil; but when was it done?
A. Probably at the time that part of the line was abandoned and re-ran.
Q. Well, now, when was that done? Where is it? Just point and tell me where it is?
A. It is 540 something.
Q. 548?
A. About half a mile below the Bridal Veil falls, or the county bridge up there.
234 Q. How far below the Hanging rock?
A. Oh, I think it is a mile and a half; mile or mile and a half.
Q. Mile or mile and a half; is that where you cross the river?
A. No sir.
Q. How near is — to where you go over to the south side of the river?
A. About a half a mile up the canyon.
Q. About a half a mile; it is in that vicinity?
A. Yes, sir.
Q. And which way is section 545 from that, up the stream or down?
A. 545 is up the river.
Q. Oh, it would be up the river?
A. Yes that would be.
Q. Yes, to the point where you did go over onto the south side, wouldn't it?
A. It would be above the point about a half a mile.
Q. It would be above the point where you went over?
A. Yes sir.
Q. Then these two sections from 548 to 545 would include the place where you changed over?
A. They are both on the south side of the river.
Q. Well yes, now were those notes made on June 29th, 1896?
A. Yes sir.
Q. That is when they were made; that is when that change was made, wasn't it?
A. That was the second time over the line that wasn't the original line on the south side though.

Q. Well I didn't ask you that; I ask you if that was the date you ran that line over there?

A. When I ran this particular line, yes sir.

Q. The time you ran this line over there; are those notes carried into that map? Look and see?

A. No sir.

Q. How?

A. No sir; they are not.

Q. They are not carried into that at all; well, they were crossed out and some others made afterwards?

A. Yes sir.

235 Q. That is correct, is it?

A. Yes sir.

Q. They were crossed out; now that was crossed out and the ones from which the map was made, was made afterwards?

A. I can't tell.

Q. Well, don't you know whether it was made before or after, or how it was made?

A. If these notes are in there I can tell, but I can't tell from recollection.

Q. Well, I understood you to say that this was the book, from which those notes——

A. (Int.) Part of them. I examined the part up here and found it was identical with those notes; but I didn't examine the whole map.

Q. Now, where is station 671?

A. Near the South fork.

Q. Near the South fork; well, it is right on the Ferguson land, ain't it?

A. Yes sir, it is on the Ferguson land.

Q. Tell me if these are carried into that map, right there (indicating)?

A. Yes, sir; that point is in the map.

Q. That point is in the map?

A. Yes sir.

Q. Well, now, those are the notes from which this map was made?

A. Yes, at this particular point.

Q. At that particular point; was that note made July 8th, 1896 (indicating)?

A. Yes sir.

Q. That was in July then instead of June that that was made, July 8th?

A. That is when the notes were made.

Q. The notes from which that map was made?

A. That is of that line on the Ferguson land, of the South fork, was made July 8th? *A.* Yes sir.

Q. 1896; where is section 682?

A. Just above South fork on the Ferguson land.

Q. On the Ferguson land, yes; is that a part of those notes, right there (ind.) are they carried onto that?

236 A. No sir; that has been backed up on; that is crossed out.

Q. Backed up on; what is that?

A. Well, we drove stakes in, and when we went to change them, we pull- them up and put 'em somewhere else perhaps it was the same time, after we drove 'em the first time we are not satisfied with the line.

Q. Well, this is the corrected ones, following right after?

A. Yes, sir; they are there.

Q. They are there; that is done at the same time?

A. Yes sir, just backed up and went ahead.

Q. And these are carried then on to that map are they?

A. Yes sir.

Q. Well, now, see if that was not done September 26th?

A. The date given on this page is August 5th.

Q. August 5th, where?

A. Right here.

Q. What does that September 26th mean?

—. "See page 26."

Q. Oh, see page 26; excuse me; August 5th that was done?

A. Yes sir.

Q. That was even after July 8th?

A. Yes sir.

Q. The notes on there wasn't made in May or June, were they?

A. No sir.

Q. They were made in August, and carried on to that map in August.

A. Yes sir.

Q. That is they were made here and afterwards carried on to that map?

A. Yes sir.

Q. In August; there certainly wasn't any map made before these notes were made was there, that contained these notes; couldn't have been?

A. Not these identical notes, no sir.

Q. No, not these identical notes?

A. No.

Q. Now, I call your attention to section, well, you tell me what section it is right there?

A. 704 plus 40.

Q. Just find that one.

Mr. HARKNESS: What is the number?

A. 704 plus 40; that isn't on this map; they are crossed out.

237 Mr. HENDERSON:

Q. That isn't on this map?

A. No sir.

Q. Well, what were these—how near is it to this?

A. Pretty near to the line.

Q. Yes?

A. I can't tell.

Q. You can't tell?

A. No sir.

Q. You answered me a moment ago that it wasn't made from

those identical notes, in relation to the other, what do you mean by that?

A. They may have made a map, or did make a map of the survey from the notes on these surveys made previously.

Q. Yes, who made that map?

A. I don't know whether I made it personally; but perhaps I made it.

Q. Wasn't Mr. Zulick, is that the name, Zulick, wasn't he the draftsman?

A. Well, not on the field maps; I refer to the field maps.

Q. Well, I am not referring to the field maps; I mean the maps made for filing?

A. I don't know anything about that.

Q. Well, that was a map made for filing wasn't it?

A. Yes sir.

Q. And made from your notes?

A. Yes sir.

Q. That was a map made up from your notes as they are finally corrected and got ready for use?

A. Well, it seems not altogether.

Q. Seems not, what does it mean?

A. Why the notes in the beginning of that book are different from the notes shown here, part of them.

Q. Well, I know that; I say they were discarded notes, weren't they, they were not carried into any map for any official use?

A. Which notes do you refer to?

Q. I mean the notes that was made before this time, the ones you just testified to, what you said wasn't carried on to the map from this book?

A. I don't know whether they were discarded or not.

Q. I show you this one of 542, did you say that was?

A. 707 plus 40.

238 Q. 707, that you say isn't on that map?

A. No sir.

Q. They are discarded notes then, are they not?

A. Those are, yes sir.

Q. Yes, they are discarded notes?

A. Yes sir.

Q. And some made afterwards from which that was made up?

A. I don't know whether they were made before or not.

Q. Well, these wasn't made until August was they, August 10th?

A. Yes sir.

Q. At that time you were still running that line on trial trips, wasn't you?

A. Yes sir.

Q. You hadn't yet fixed and settled where that, in your own mind where that line was to be?

A. We had not decided all the details of the line, no sir.

Q. Well, I say you hadn't decided?

A. The general location of the line was fixed at that time.

Q. What?

A. The general location of the line was fixed at that time.

Q. What do you mean by that, that it was in Utah county?

A. No, sir. No sir; that it was on that side of the river, and the general location of each of the curves.

Q. Well, I didn't ask you as to the general location; I ask you if the definite location was fixed on August 10th?

A. No, sir; not the final definite location.

Q. No, and you was still running trial trips, wasn't you?

A. Yes sir.

Q. There is one of 693, where is that?

A. Just above the South fork.

Q. Just above the South fork; I will ask you if these notes went into that?

A. Yes sir, that is on this map.

Q. These notes went in there?

A. Yes sir.

239 Q. Well, I see that has been backed up on as you say; what does that mean? It has been crossed out.

A. It means that we remodelled the line after the map was made.

Q. What is it?

A. It means that we restaked the line after the map was made.

Q. That you restaked the line after the map was made?

A. Yes sir.

Q. Why would you cross out the original notes from which the map was made if you simply restaked?

A. We always cross out all the notes except the last ones we take.

Q. Yes, certainly; that is what I am asking you; you would cross out your trial trips when you determined which ones you will use, don't you?

A. Well, we always cross them out as soon as we stake a new line.

Q. I know, after you have abandoned it you cross it out?

A. Yes.

Q. And you finally take the ones that are left unchecked off?

A. Yes sir.

Q. And that was August 11th; you were still running them trial lines, wasn't you?

A. Yes sir.

Q. Now, I will show you one of 707 plus 34, I guess it is; I will ask you if that is it, right there?

A. Yes sir.

Q. 707 plus 34?

A. That isn't on this map.

Q. That isn't on this map?

A. No sir.

Q. Those were discarded?

A. Yes sir.

Q. And something else ran out?

A. Yes sir.

Q. And that was done on August 13th, wasn't it?

A. Yes sir.

Q. At that time you had not fixed your location yet; now I show you another one of 625 plus 33—695?

A. Plus 33?

240&241 Q. Yes.

A. That is on this map?

Q. What?

A. That is on this map.

Q. Where is it?

A. Just above South fork.

Q. Just above the South fork; right on this Ferguson land, ain't it; that is it; ain't it (indicating)?

A. Yes, sir.

Q. Yes, right on this Ferguson land; that goes on to that map, don't it?

A. Yes sir; that is on that map.

Q. And these are the notes from which that map was made?

A. Yes sir.

Q. And I will ask you if that wasn't made August 21st, 1896?

A. Yes sir.

Q. Why, I understood you to tell me this forenoon and to show me a book, that all these notes were made in June; that you closed it up, and you showed me some dates here in a book?

A. Yes sir, I ran the line——

Q. (Int.) In which you closed it up in June or some of the first days of July; what does all that mean, Mr. Baxter?

A. Well, it means we ran a line and got through in June or first part of July.

Q. Well didn't you tell me in reply to my questions this forenoon that you had run that and finished it up and finally adopted it, definitely, finally, the last days of June or the first days of July?

A. Yes, sir; adopted that side of the river as the route for the railroad.

Q. Well, that wasn't what I asked you; just read that question to him; now just listen to it Mr. Baxter?

Question read.

A. Yes sir, I did.

Q. And you showed me a book, didn't you, that had dates in it?

A. Yes sir.

Q. And you told me that that was the notes, the last and final fix-up of it?

A. No sir.

Q. You didn't say that?

A. I didn't say that.

Q. Well, I asked you for that didn't I?

A I misunderstood you if I answered that way.

242 Q. How is that?

A. I misunderstood you if I answered that way.

Q. Why did you produce the book there for that purpose?

A. Because I worked there all the summer.

Q. Now this was on the 21st of August, right on the Ferguson land that you was yet speculating?
A. Yes sir.
Q. About where the line would be, wasn't you?
A. In that way.
Q. You made minutes, and made notes which finally went into the map that was used as the official map didn't you?
—. Yes sir.
Q. Now, I ask you where 739 plus 30 is?
A. That is up opposite the North fork of Provo river.
Q. How is that, where is it?
A. It is opposite the North fork of the Provo river.
Q. Where is North fork?
A. It is about a mile above the South fork.
Q. It is about a mile above the South fork; that is still on the south side of the river?
A. The line was still on the south side of the river.
Q. It was still this changed line?
A. Yes sir.
Q. And a little ways above the Ferguson land?
A. Yes sir.
Q. Yes, just above; I will ask you if these are the notes that went into that?
A. No sir.
Q. How is that?
A. These are not the notes.
Q. Just wait a minute—that is the one right there (*ibd.*).
A. Well, I can't tell from that; that is not given here.
Q. That is not given?
A. No sir.
Q. And that was discarded and another one made I suppose?
A. Yes sir.
Q. I will ask you if that wasn't made in September 3rd, 1896?
A. Yes sir.
Q. Why on September 3rd you were still speculating there, and hadn't yet located that line, had you?
A. Hadn't got through with it.
243 Q. No, you hadn't got through with it?
—. ——.
Q. I ask you now where 738 plus 46 is?
A. That is at the North fork.
Q. That is at the North fork; that is near the Ferguson land, isn't it?
A. Yes sir.
Q. On its north line. I will ask you if *that* are the notes that went into that?
A. This one, the last one, these went.
Q. These?
A. Yes sir; that is on this map.
Q. These are the notes that that was made up from; and I will ask you if that was not done on October 29th, 1896?

A. Yes sir.
Q. Why, in October then, after the commencement of this suit you were still speculating where that line would be?
A. Yes sir.
Q. Still working there on October 29th?
Mr. HARKNESS: Where is 738 plus 46?
A. At the North fork about half a mile, or about a half a mile above the Ferguson property.

Mr. HENDERSON:

Q. And it is on the ch-nged line?
A. On the changed line.
Q. Where is 754 plus 76?
A. That is a quarter of a mile above the North fork.
Q. A quarter of a mile?
A. Yes sir.
Q. It is in that vicinity?
A. Yes sir.
Q. On the changed line?
A. Yes sir.
Q. And I will ask you if those notes there went into that?
A. Yes sir.
Q. They went into it?
A. Yes sir.
Q. That was done October 30th, wasn't it?
A. Yes sir.
Q. Yes; the minutes from which the official map of this thing was made, was made on the 30th day of Octobe r?
A. Yes sir.
Q. 778 where is that?
A. About three-quarters of a mile above the North fork.
244 Q. Well, it is that same vicinity?
A. Yes sir.
Q. And on the changed line; and see if these are the notes that went into that from which that was made?
A. Yes sir.
Q. That was done on October 31st wasn't it?
A. Yes, sir.
Q. 406; see if that is what that means?
Ans. Yes sir; 406 plus 47.
Q. 406 plus 47, tell me where that is?
A. That is about a half a mile up the — from the mouth of the canyon.
Q. About a half a mile up from the mouth of the canyon?
A. Yes sir.
Q. That isn't up there; you say those notes went into that?
A. No sir; those notes are not on this map.
Q. I thought you said they were?
A. Not the last one; you want the last one.
Q. 406 plus something, isn't that on there?
A. No sir, that isn't on this map.

Q. That isn't on this map you were surveying there yet?

A. Yes sir.

Q. You had not completed your notes then from which your official map was to be made of the line, had you?

A. Well, I don't know whether it — called the official map; we had not completed all the work.

Q. Well, you had not completed all the work; and to your knowledge there never was any official map made until then was there?

A. I don't know.

Q. You don't know about that; well, I will ask you if that was not done November 12, 1896 (indicating).

A. Yes sir.

Q. Where is 423 plus—well, what is that?

A. 423 plus 60, it is a mile up from the mouth of the canyon.

Q. It is a mile up from the mouth of the canyon; that was done November 11th, wasn't it?

A. Yes sir.

245 Q. Now where is 454 plus 95?

A. That is a mile and a half up from the mouth of the canyon.

Q. Yes, and that was done November 7th, was it not, 7th or 17th?

A. November 7th, that isn't on this map.

Q. No; and where is 452 plus 60?

A. About a mile and a half up from the mouth of the canyon.

Q. Yes; that was in November; where is 470 plus 52?

A. In the same vicinity.

Q. 475 plus 72?

A. About two miles up from the mouth of the canyon.

Q. Is that on which side of the river?

A. The north side of the river.

Q. On the north side?

A. Well, we didn't have a new line at that point; the line was always on the north side of the river at that point.

Q. Where is 503 plus 58, is that, or 53?

A. 58.

Q. 58?

A. Why, it is about two and a half miles up from the mouth of the canyon.

Q. Well, I think that is all—oh, I would like to ask you this, Mr. Baxter, how does this come here; I notice that here along until you get pretty well towards the back of the book that these dates come consecutively, and then they change, and they just skip all around and run backward, and—I will find a place here; I found place here a little while ago; well, I don't run on to any of them now. October, November, it went back from October to November in this book. Well there (indicating)—there is November runs along here; it has been October and November, you see that is November, and so it runs along up, creeping along, that is November all along there; that is November; there is November, and the next date is October again?

A. This is November here.

246 Q. Well, there (ind.).

A. Oh, yes, up there.

Q. Yes, up there, right at the top of the page; how did that happen, I don't understand. These are made up by you are they not Mr. Baxter?

A. Made under my direction.

Q. Well, they are made by you?

A. No sir, not at first; I didn't do this writing; I don't know how they got into the book this way, unless they are copied out of another book. A part of the dates I see run backward, and those places we backed on the line, down the creek; run up against the numbers.

Q. Mr. Baxter you are a surveyor, are you?

A. Yes sir.

Q. And an engineer?

A. Yes, sir.

Q. What are field-notes?

A. Field-notes are the data and figures secured on a survey.

Q. You understand don't you perfectly well that the field-notes of a survey are the notes—it is the book-keeping of surveying?

A. Yes sir.

Q. And that the field-notes are the original entries?

A. Yes sir.

Q. You understand that, don't you?

A. Yes sir.

Q. And you understand that the field-notes are the notes that the operator right in the field with the instrument before him makes in the field himself; you understand that don't you?

A. Yes sir.

Q. I understand you to testify that that was the field-notes?

A. Yes sir.

Q. From which that was made; were those made in the field?

A. I think they were.

Q. Well, they were made under your supervision?

A. Yes sir.

Q. You must have been there then?

A. Yes sir.

Q. You knew the correctness of them at the time they were entered?

A. Yes sir.

Q. So that you produced them here as the entries, or the original entries?

A. Yes sir.

247 Q. For that purpose they ought to occur in order of time, hadn't they?

A. Not necessarily.

Q. Well, I can't imagine conditions under which not necessarily?

A. Well for good reasons.

Q. Well, for what good reasons?

A. Well, when we re-ran the lines, two boarded or camped at Thayer's, and wanted to change the line below Thayer's. The num-

bers ran from Provo up the canyon, and in a case like that it would be much more convenient for us to back the line down, as the saying is, and make the survey of the high numbers first and of the low numbers afterwards; and then we would begin in the back end of the book and write forwards.

Q. You would commence at the back end of the book?

A. And write forwards.

Q. And write forwards?

A. Yes sir.

Q. Now, if you will just turn to the end of the book where it is the other way?

A. But I notice that the high dates in here are back of the lower ones.

Q. Just show me how you could write the book backwards, and how you would write ahead and how you could just fill up the book to make it come together?

A. Well, I don't know how it happened that it come together, that they had come together, but it is certainly a fact that they are written this way in this book.

Q. Well, I know that, I called your attention to that, that was written this way in this book?

A. And it is very frequently done?

Mr. HENDERSON: If the court please, I can make the examination short*her* in the morning.

The COURT: The hour is past for adjournment now.

Mr. HENDERSON: By the way, I have one question I want to ask, if these are all the original field-notes?

A. I think not.

Q. Now Mr. Baxter, I would like to call on you for those field-notes?

248 A. I haven't got them in my possession.

Q. What is that?

A. I haven't got them in my possession.

Q. Who has them?

A. They are in the chief engineer's office.

Q. Where are they?

A. They are in Salt Lake.

Mr. HENDERSON: Judge, I wish, with the other matters, that they would bring down those notes, and these, I would like to examine these in the evening.

Adjournment taken until Wednesday April 20th, 1898, at 9.30 a. m.

Wednesday, resumed session.

F. E. BAXTER, recalled for further cross-examination.

Examined by Judge HENDERSON:

Q. Have those field-notes come down yet?

A. I don't know; they probably have. The train gets in at 9.30; they are not probably up here.

Q. They are not in the court-room?

A. They are not in the court-room.

Q. I asked you last evening about these dates being arranged in the way they are; you have no further explanation about that?

A. Why, the explanation that I have to make is that the work of retracing or going over the line again was started at the upper end of the canyon and run down, backwards on the line, and in order to make the notes read straight ahead, you start at the back end of the book and work forward, working backwards on the line, and writing the notes from the back end of the book, in order to make them read straight, for the convenience of the draftsman in making the map.

Q. Let me inquire a little about these books; that book, and these books that are like that.

The COURT: Any number, Judge, so as to make the record straight.

Mr. HENDERSON:

Q. Yes. I call your attention to Defendants' Exhibit 2
249 D. H. R. and the books that are like that are standard books for this kind of work, are they not?

A. Yes sir.

Q. They are printed and made for that purpose?

A. Yes sir.

Q. And the scheme of the book is that to make a record it takes two pages?

A. For the transit notes we usually use two pages.

Q. Well, that is the scheme?

A. Yes sir.

Q. That is what the book is made for, calculated for, it takes, when you open the book, it takes the two pages that are exposed?

A. Yes sir.

Q. To make the record; on the left-hand side are the stations and the alignment, and the angles, etc.?

A. Yes.

Q. In columns which are ruled in the book?

A. Yes sir.

Q. On the right-hand side there is one red mark going down through the center of the page, and in railroad work that represents the center line of the track, don't it?

A. Yes sir.

Q. That page is devoted to topography?

A. Yes sir.

Q. And to such little minutes as is proper to make?

A. Yes sir.

Q. That is correct, in commencing one of these books that you use, you commence with a new book at the initial point; it is the custom and it is supposed that the engineer, the man who used it in the field, will commence at the bottom of the page?

A. Yes, sir; that is the customary way.

Q. Yes, that is because you draw a diagram of the work on that

page, and you do it because you, standing at the initial point and looking down the line, you draw that diagram from the place you stand, up the book?

A. Yes sir.

Q. But you go through the book in the ordinary way?

A. Yes sir.

Q. So as to look from you, and then you number the stations on this side here?

Ans. Yes sir.

Q. When that page is gone up you go right over to the next, and go up that one?

A. Yes sir.

Q. That is the usual way of using these books?

A. Yes, sir, that is the usual way.

250 Q. Yes, and in making this work connect, the general topography is taken and described on that page?

A. Yes sir.

Q. And it is true, is it not, that dates are stated, dates of the work?

A. As a rule, yes sir.

Q. As a rule, yes; that is it is calculated that the book will show as the work progresses not only where it was, what the stations are and what the topography is, but the date the work was done?

A. Yes sir.

Q. Yes, and these books were used in that way?

A. Yes sir.

Q. Now I show you a book here marked "465," and I see that it contains your name as assistant engineer, or locating engineer or local whatever it is?

A. Locating engineer, I think.

Q. That is a book that was used on this work, was it not?

A. Yes sir.

Q. Under your directions?

A. Yes sir.

Q. The same as the other?

A. Yes sir.

Q. You were present?

A. Not all of the time of this work.

Q. Well, what portion of the time was you present when that was being used and made?

A. I think I was present the greater part of the time when this work was done.

Q. Yes, that was used to make the notes of original entry?

A. Yes sir.

Q. Whose handwriting is it in?

A. That is Mr. Collier's.

Q. Mr. Collier's, and it is commenced at the initial point of this work here in Provo?

A. No it doesn't commence at the initial point.

Q. Where does it commence?

A. Station 245, which is about four and a half miles out from Provo.

Q. Well is that on the main line?
A. No sir; that is on the Provo Canyon line.
Q. What point is that right there, what station is that right there?
A. 111 plus 30.
251 Q. Where is that, let me take your map here, where is that?
A. At this point (indicating)?
Q. What is the name of it?
A. 111 plus 30.
Q. 111 plus 30?
A. That has been copied from Book 1, from another book, this entry here, but the original notes were taken in the field from section 245.
Q. That is a copy of the notes?
A. With the exception of these three lines, yes.
Q. That is a copy of it anyway and commenced substantially where this work leaves the main line, don't it?
A. Yes sir.
Q. Yes, but from there on it is the original?
A. Yes sir; from station 245 is the original.
Q. Where is book 1?
A. I suppose it is in the court-room.
Q. Just get it; is that it?
A. Here it is.
Q. Just let me see where this is copied?
A. Want to compare those notes?
Q. Well, I just want to see it; is that it right here?
A. I don't see the notes for 111, that particular station—here it is 111 plus 30; that is on the second or third line I think, second line.
Q. Well, now, you just find any particular entries that are there?

Mr. WEDGWOOD: We can't hear you Judge.

Mr. HENDERSON:

Q. I asked him to show me the particular line of station 111 plus 30?
A. Here is 111 plus 30, the hundred isn't carried up.
Q. Now where is the figures?
A. P. T. plus, and the angle of 17 degrees, 9 minutes, the same in both books, '94 plus 15 P. C. 1 right.
Q. Now, let me enquire, is this Book Number 1 I think you say that was copied from, is that the book that was used in the field when these notes were made?
252 A. Yes sir, that is the book that was used in the field.
Q. How long, how much was this book used?
A. I don't know how long it was used.
Q. Do you say that that book was ever used in the field?
A. Yes sir.
Q. By the workmen?
A. Yes sir.

Q. And filled up in that way?
A. Yes sir.
Q. I don't understand this; how does it come that this part appeared in the back end of the book?
A. Why these particular notes are the notes of the second line; ran one line, an angle line up and came back here and ran the second line that is why these notes are in the middle of the book.
Q. You ran an angle line, that is true, isn't it?
A. Yes.
Q. The first line you ran was an angle line, wasn't it, all the way up?
A. Yes sir; I think so, up to the—well, I can't tell by the notes how far.
Q. Well, just tell me how far?
A. I ran about five miles and a half.
Q. Isn't it an angle line from there on?
A. Well, it is ahead of the located line up there, but we don't call that angle line.
Q. Well, what is the fact about whether it was an angle line?
A. Well, it was a line with curves in.
Q. It was a line with curves in, from there on all the way?
A. So far as these notes go, as far as I have looked.
Q. Well, just look through and tell me how much of that line was worked an angle line first?
A. Well, a located line on upstation 380, about a little over seven miles.

Mr. HARKNESS:

Q. What station is that?
A. 380.

Mr. HENDERSON:

Q. About seven miles; is that up where Nunn's mill is?
A. No, it is way below Nunn's mill.
253 Q. How far below?
A. Must be two miles.
Q. About two miles; it is up in that vicinity, going up in that vicinity, you ran an angle line up to that?
A. No, ran a location line.
Q. How?
A. No, ran a location line.
Q. I understood you, you ran an angle line?
A. An angle line about five miles and then came back and ran a location line to station 380.
Q. And what was the object of running an angle line up there?
A. In order to help run the located line.
Q. Now, won't you turn in that book to station 634.
A. Yes, sir; I have it.
Q. You have that; now let me see that; it runs right along from there does it, just show me where it is.
A. Here is 634, and here is 632.

Q. And up to 641?
A. 641.
Q. Yes, all right.
Mr. HARKNESS: What station is that?
Mr. HENDERSON: 634 to 641; is that substantially the same point that is indicated on this page that I now show to you, on that book?
A. Yes, I think it is substantially the same.
Q. You was along with them at that time?
A. I can't say.
Q. Can't say whether you were or not?
A. No.
Q. Just keep that place; which of those two books was made first?
A. I think that Book No. 1, I think that was made first.
Q. You think that was made first?
—. ——
A. What date was that work done?
A. There is no date given here opposite that work.
Q. Can you tell from that book what date that work was done?
A. No sir.
254 Q. Why?
A. Because there was no date given here.
Q. Why wasn't the date given?
A. I see it was neglected by the instrument man; he neglected to put down the date that he did the work.
Q. How do you know that that was made before this?
A. I simply judge so from the fact that this is the first book, and we would naturally fill this up before we started another book.
Q. Yes, naturally you would fill that up before you started this; that is the only reason?
A. That is the only reason I have.
Q. There is no date for that?
A. No date at that point, no sir.
Q. Well, can you tell from previous dates approximately?
A. I can tell when this book was started.
Q. Well, tell me when that book was started?
—. March 24th 1896.
Q. March 24th, 1896?
A. Yes sir.
Q. Now, run along there, are there any other dates?
A. March 25th, '96.
Q. March 25th you had got clear up to where section 200——
A. (Int.) No station 65, about a mile and a half.
Q. Go on?
A. March 26th. Station 154.
Q. How far up is that?
A. Nearly three miles.
Q. Nearly three miles, well from what point?
A. From the initial point, which is at the Rio Grande Western depot, I think.
Q. Go on—well, you have gone clear up to that point that I have

called your attention to and there are but those two dates in that book?

A. Three dates.

Q. Three dates?

A. Yes sir.

Q. And they are March 24th, 25th and 26th?

A. Yes sir.

Q. And at that time you have got about how far was that, about five or six miles, wasn't it?

Mr. HARKNESS: Give me the point.

A. Station 154, about three miles.

255 Mr. HENDERSON:

Q. You had got about three miles started?

A. That was the morning of the 26th.

Q. So far as that book goes?

Mr. HARKNESS: I didn't get the answer yet how far does that book go, that was the question I didn't get; you had but three dates you say?

Mr. HENDERSON: Well, he had but three dates in it up to the station——

A. Up to station 340.

Mr. HARKNESS: I thought there was no other dates in the book.

Mr. HENDERSON: Well, I don't know that there is. I asked him to look through the book; you didn't find any other dates there?

A. Yes, sir; there is another date here?

Q. When was that?

A. April 9th 1896; we had gone over this line again at the station, from there back, the station is 524.

Q. 524?

A. Yes sir; we had gone back from 630.

Mr. HARKNESS:

Q. Well, now, does that book go to 630, that is what I am trying to get at?

A. Yes sir, one line does.

Mr. HENDERSON:

Q. And so far as that book shows, the last date is March 26th?

A. No, sir; April 9th.

Q. I mean before reaching that station 630?

A. Yes sir.

Q. Now, I show you this page again on the other Book, on Book 465 which you say is substantially the same place; keep that.

A. 640.

Q. And I call your attention to that page there; I see on the side where you have marked topography, you have marked a dam, proposed dam; you marked that there, I see?

A. Yes sir.

Q. What was you going to build a dam for?

A. I wasn't going to build any dam.

Q. Of, that is a proposed dam that you found there?
A. Yes, sir; that was indicated there by somebody.
Q. You have got it there in this one, now that is at a point near Hanging rock, isn't it?
A. I don't know.
Q. Don't you know?
A. No sir.
256 Q. Look and see if you can tell me from that, if that isn't a point near Hanging rock?
A. Yes, I think it is the Hanging rock.
Q. That is Hanging rock; now I show you the other book which you say was made first?
Mr. WEDGWOOD: Let me ask a question; what station is that?
A. 638 and '7.

Mr. HARKNESS:

Q. 638?
A. 637 and '8.

Mr. WEDGWOOD:

Q. Well, can't you tell me where it was?
A. Well, it was right between that, near that 638.

Mr. HARKNESS:

Q. Is there any date on that memorandum?
A. No sir; not this one.

Mr. HENDERSON:

Q. Now, that is what I asked him; the last date up to that time was March 26th, that is, the last before that.

Mr. HARKNESS: You had one April 9th, I don't know what——
Mr. HENDERSON: Well, that is the one, he said he had gone over the line and had gone back below somewhere, and done some work somewhere.

Mr. WEDGWOOD:

Q. Just show me where you find 638?
A. A little over a quarter of an inch from that last station that is marked.
Q. It isn't marked?
A. It isn't marked.

Mr. HENDERSON:

Q. You say that that is at Hanging rock?
A. Yes sir.
Q. Now, I show you this other book and the page which you say is substantially the same point, and I see that you have marked there, "628, cross-line claimed by electric plant," is that the first one that you say you made?
A. Yes sir.

Q. You put that there?
A. Yes sir.
Q. Well that was a condition that you found there when you got there?
A. Yes sir.
Q. That is represented as being a little below the Hanging rock? Isn't it?
A. That is below the Hanging rock.
257 Q. Yes, just a little below.
A. Yes, about 600 feet.
Q. 600, well——
A. The other was a thousand feet; the other is 638 and this is 628, a thousand feet.
Q. What are the stations from here?
A. 627, 628; this note says "628 cross-line claimed by electric plant."
Q. What is the number on the other one?
A. 638, a thousand feet farther up, and the Hanging rock.
Q. That is, each number is a hundred feet?
A. Each number is a hundred feet; ten numbers would be a thousand feet.
Q. 628?
A. To 638.
Q. To 638 would be a thousand feet?
A. Yes sir.
Q. That is below the Hanging rock?
A. Yes sir.
Q. And there you found a line at that place where you passed on to what was claimed by the electric plant?
A. Yes sir; we found a line of stakes probably that we crossed.
Q. And at the Hanging rock a proposed dam?
A. Yes sir.
Q. Now, I want to ask you about this Book 465, if that does not include the preliminary, the first located line of this road up to a point far beyond Hanging rock?
A. It contains located line and preliminary line at places; some places there was no angle line ran, where the line was easily located, we located it at once without running an angle line ahead of it.
Q. Yes, it does contain a located line, doesn't it?
A. Yes sir.
Q. And before the line was located it was a preliminary survey, wasn't it?
A. Yes sir
Q. That is, when that book was first used, wasn't it put into the field and used as the notes of a preliminary survey?
A. I didn't understand the question.
The COURT: Read the question, Mr. Reporter.
Question read.
A. I will have to look at it and see what the first entries are. We started off on a located line, a curve line in the book.

258 Q. Started on a located line?
A. Yes sir.
Q. Isn't that crossed out?
A. Yes sir.
Q. That shows that it wasn't used, don't it?
A. It wasn't finally used, no sir.
Q. It wasn't finally used, then it was a preliminary survey wasn't it?
A. Well, we call it a located line when we run the curves.
Q. Oh, you call it a located line when you run the curves; well, I am talking about the line that was filed and located, and a map made?
A. Well I will have to compare it with the map to tell that.
Q. Well, if that will take any time I won't ask you to do it here on the stand; let you do it off the stand and ask you about it afterwards.
A. Well, I will look it up afterwards.
Q. Yes, you do that afterwards; I call your attention to the first page used as a fly-leaf, and ask you whose writing that is?
A. Some of it is mine and some of it is Mr. Zulick's, I think.
Q. Some of it Zulick's?
A. Yes sir.
Q. Which is your- and which is Zulick's?
—. That that is crossed out, that is mine.
Q. That that is crossed out?
A. Yes sir.
Q. Now I wish you would just read that fly-leaf, read that which was written by you.
A. "Provo to Park City, preliminary line from station 58 plus 15 to station 1056."
Q. Now what was written by Mr. Zulick?
A. Preliminary line from station 802 plus 63 to station 1056.
Q. Now turn to the cover of that book, who wrote that?
A. Mr. Collier.
Q. That is Mr. Collier's writing?
A. Yes.
Q. Just read that.
A. Provo to Park City; located line, station 802 plus 63, to station 1056.
259 Q. Now, Mr. Baxter, I want to ask you if it isn't true that that book was given to the fieldman and used in the first place as a preliminary line. Hadn't you got through using that book, correcting back and crossing out as you see that, correcting it up, and whenever you corrected a section of the line, drew your pencil through it and relocated that, and re-ran it, and when you had got through to the end of the line, those that were left wasn't they inked over as a rule?
A. The main parts of it, yes sir.
Q. And then wasn't that book labeled as the located line?
A. Well, I don't know when it was labelled on the outside as the located line; that is, I don't know.

Q. (Int.) Well, you know the habits and custom of your work and the work in your office; I ask you if that don't indicate that that is the way that thing is done?

A. Yes sir.

Q. And that those would be the notes between those stations of course from which this map was, or from which a map was made as a located line?

A. Yes sir.

Mr. HENDERSON: Now have you got that other map here, that first map?

Mr. HARKNESS: This is the one.

Mr. HENDERSON:

Q. Just look at that and tell me what that is.

A. A map of route from Provo to a point twenty miles up the Provo river.

Q. Yes, it includes the land, the Ferguson land and Hanging rock, etc.?

A. Yes sir.

Q. Just point out to me the place, Hanging rock.

A. About here.

Q. Now the red line is the road?

A. Yes sir.

Mr. WEDGWOOD: Give it to us in stations give stations.

A. About 638.

260 Mr. HENDERSON:

Q. Is that the line of this road as shown by that other map, the one we have been using here?

A. No, I think not.

Q. Not that; just show me where, running through this Ferguson land, where that road would be on this map?

A. Came along here and the line dropped into the river at this point, about where it crosses the west line of the Ferguson land, and it passes 150 or 200 feet south of the Ferguson house, and then went around with the wagon road for a quarter of a mile or more.

Q. Let's see, where is this; is the wagon road laid down on this map?

A. No sir; it isn't shown here—yes it is; here is the wagon road; here is that big bend in the wagon road, right here.

Q. Now show me this point here?

A. That point is——

Q. Well, that ain't the point I mean.

Mr. WEDGWOOD: We can't hear you Judge.

Mr. HENDERSON: I am simply getting information there. I want him to identify a point for me.

Mr. HARKNESS: Judge, I think you could save time if you will — him take one of those other maps which is an exact copy and let him mark the two lines on it.

Mr. HENDERSON: Well, I will do that. Where is that blue print?

Mr. HARKNESS: Let him show the whole change.

Mr. HENDERSON: Well, it don't seem to be here.

Mr. HARKNESS: Well, hold on, perhaps I can furnish you one; is that a copy of that—you can ask him whether it is or not.

Mr. HENDERSON:

Q. Is this an exact copy from the same map; it don't look to me like it is. Is that a copy of the blue print that you have in your hand?

A. No sir; this is the Mercur line.

Mr. HENDERSON: Yes, this is another thing.

Mr. HARKNESS: Oh, that is another thing here is it?

Mr. HENDERSON: Now, I can identify one question here
261 that I want to find out; show me that same point on this map?

The COURT: Speak a little louder Judge, please.

Mr. HENDERSON:

Q. Show me the line where it passes the point. I don't know how to indicate that.

A. The bend in the road about 400 feet above Ferguson's house.

Q. Yes, the bend in the road about 400 feet above Ferguson's house right there?

A. Yes sir.

Q. Now do you say that the road is laid out there?

A. Yes, sir; that black line with the dotted line on the side of the road.

Q. Well, there doesn't seem to be a continuous line?

A. Well, it is not the red line here.

Q. Well, there is certainly a break in it; it doesn't seem to come together; now is that intended for the road; now you see it further up there as indicating hills?

A. This blue line with the dotted line parallel to it is the road, coming along here.

Q. It isn't shown at the particular point, the road, is it?

A. No, there is a little gap here about a sixteenth of an inch, long a little slide or ridge.

Q. The line of road as indicated by this map that you have got before you was on the northwest side of the river, wasn't it?

A. Yes sir.

Q. All the way through the Ferguson land?

A. Yes sir.

Q. Now I ask you if that map was made from that book, that I have shown you and that you testified first was used as a preliminary survey, and then as a located survey; that part of it that wasn't crossed out appears to be the notes from which that map was made?

A. Yes sir; that seems to be made from these notes.

Q. And they are the field-notes ain't they?

A. Yes sir.

Q. Now I want you to look in that book and tell me if you can tell anything about when that survey commenced, from the book?

A. Here is a note of May 11th, '96 station 543 plus 16.

Q. And that is the first one you find?

A. The first one——

262 Q. And how far is that up the canyon?

Mr. HARKNESS: What station is that?

Mr. HENDERSON: 645—or 465.

A. 465; that is about a mile below the Thayer place, I think; about two-thirds of a mile below the wagon bridge on the county road.

Q. Yes, it is up a mile or so below Hanging rock?

A. Yes sir.

Q. And that is the first date in the book?

A. Yes sir, and May 12th, station 563, that is a thousand feet below the county bridge across the river.

Q. Yes, go on?

A. May 13th, station 605.

Mr. HARKNESS: One moment, those are running down the canyon?

A. No they are running up the canyon; May 13th, station 605 about 3,000 feet below Hanging rock, 3,300 feet below Hanging rock.

Mr. HENDERSON: Go on; now that is three dates, is it?

A. Yes sir; May 19th, station 790, nearly a mile above the North fork.

Q. That is four?

A. May 25th, '96, station 752, that is down, that is just above the North fork; it seems we backed up. Those are all the dates I find.

Q. That is all; five dates; what is the reason that dates were not kept in that book?

A. Why, simply a matter of neglect.

Q. Mere matter of neglect?

A. Yes sir.

Q. Nothing else?

A. No sir.

Q. Look at the first few pages on that book and see if any of the entries on there have been erased?

A. Yes sir; they have, the first two pages.

Q. No, I don't mean a line crossed over it, I mean that entries have been made there that have been rubbed out. Oh, leaf along there several pages, and see if you can see anywhere where it has been erased?

A. Yes, here is one, page 5.

Q. Let me see it; yes, on that page there has been quite
263 a good many entries erased there, hasn't there, on the topog-
r-phy side of the book, and where general notation- are made?

A. Yes.

Q. You have no means or knowing what they are?

A. Yes, sir; I can read them partly.

Q. Can you read all of them?

A. No sir; I can't read all of them; they refer to one of the section corners.

Q. Well, how do you know?

A. I can read it "sec." and "cor." is plain to be seen.

Q. I ask you if there is any there that you can't read?

A. Yes sir.

Q. Any means of telling what they are?

A. No sir, they are on the same line with that though.

Q. They are on the same line; do you find that there is anything there that indicates that it was not mere figures?

A. Please repeat the question.

Question read.

A. Wasn't mere figures?

Q. Yes.

A. Why, there was certainly something besides figures here.

Q. Well, I mean that have been erased?

A. Yes sir.

Q. You find things that are evidently writing?

A. Yes sir; the section line that was partly erased, but I can still read it.

Q. Well, I have asked you now that you have found things that was evidently writing that have been erased?

A. Yes sir.

Q. Can you read those?

A. Only part of it; I can't read everything.

Q. You can't read all that have been erased?

A. No sir.

Q. You have no means of knowing what that part was that you can't read?

A. No sir.

Q. Now showing you this other book here again, this No. 1. I ask you to read the fly-leaf of that book?

A. "Superceded by later surveys properly filed."

Mr. HARKNESS:

Q. What book is that?

Mr. HENDERSON: That is Book No. 1.

A. That is Book No. 1.

264 Q. That indicates what the book is, don't it?

A. Yes sir.

Q. Put there for that purpose?

A. Yes sir.

Q. And that states the truth does it?

A. Yes sir.

Q. States the fact; read the outside of the book the entry there?

A. No. 1; Provo to Park City, angle lines and miscellaneous; stations 58 plus 15 to station 707.

Q. Now look at the other side, the entry on the inside was an entry put there wasn't it in the first place?

A. The entry that I first read was put in in the office after the notes were turned in.

Q. After the notes were turned in?
A. Yes sir.
Q. And the one on the outside?
A. Was put on by Mr. Collier.
Q. Well, do you think that was put on in the ordinary course of business before they commenced work?
A. Yes sir, when he filled up the book, he put a title on the outside of it.
Q. Yes, when he filled it up, but what I mean, did he put that on before?
A. Before he filed it?
Q. Yes?
A. Probably not.
Q. Probably not; that is what I say; it was used to indicate what the book contained?
A. Yes sir.
Q. And it does contain a mere preliminary survey, that has been superceded by others, and miscellaneous things?
A. Yes sir.
Q. And that is all there is of it?
A. Yes sir.
Q. That contains no record of the located line as located?
A. It is just what it says.
Q. Not finally located.
A. No sir.
Q. No- I see that on the very first date and on the very first page there, a-d at the very head in the way these books are kept on the lower line?
A. Yes sir.
Q. Is a date of Tuesday, March 24th, '96?
A. Yes sir.
Q. Whose writing is that?
A. That is Mr. Collier's.
Q. An angle line is a line that is run on straight angles, turning sharp corners at the angles?
A. Yes sir.
265 Q. It doesn't show the curves of the road at all?
A. No sir.
Q. Isn't it true that this was made up to the point that it goes, as it states here, angle lines between certain stations and miscellaneous notes; doesn't it show mere straight angle lines?
A. No sir, there are other things there.
Q. Well, I say there are other things, but laside from the miscellaneous things?
A. Well there are parts of the curved line are show- there.
A. Yes, but that is under the head of miscellaneous, isn't it?
A. According to that title it is.
Q. Yes, according to that title, so considered it is miscellaneous matters; those angle lines are run and were run in this instance were they not, and notes of the angles sent to the office, and there in the office the curved lines were supplied?

A. No sir.

Q. They were supplied by the actual field-work, were they?

A. Yes sir.

Q. You didn't make in this book at all a continuous angle line did you?

A. No sir; oh, it was con-inuous for a certain distance. I don't know how long.

Q. Well, but over all parts of the work did you run one——

A. (Int.) No sir; it wasn't a continuous angle line that I ran up the canyon.

Q. No, it wasn't a continuous angle line; at places at least it was just a straight angle line and afterwards, and when you come to make this Book 465, it contains the field-notes of the angles, don't it?

A. Yes.

Mr. HARKNESS: Just read me that question. It is an argument that the witness doesn't understand at all.

Question read.

Mr. HENDERSON:

Q. Well, I will ask you again; does that contain a complete angle line as far as it goes?

A. You refer to the first book?

266 Q. Number 1?

A. I don't think so.

Q. No, then it doesn't contain a complete angle line as far as it goes, does it?

A. I don't think it does.

Q. No, I don't think there is any misunderstanding about it; I understood it so. What was the object of running an angle line in this instance?

A. To assist in making the location.

Q. To assist in making the location?

A. Yes, sir.

Q. That is to determine whether a line could be located, and if so, the proper place to locate it?

A. Yes sir.

Q. That was the object; it is in every sense, and in the strictest sense a preliminary, an exploring survey, ain't it?

A. Well, it is a survey made as a rule in advance of the location.

Q. Yes, made in advance.

A. And upon which the location is based.

Q. It is an exploration, and it is simply preliminary?

A. Yes sir, it is preliminary to the location.

Q. If you shouldn't happen to locate at all why then it would mean simply an exploration, wouldn't it?

A. I suppose so.

Q. And if you did locate it afterwards why it would be a preliminary to determine whether the location should be made.

A. Well, not to determine whether a location should be made, but how to make it.

Q. How to make it, that is it, is that true?
A. Yes sir.
Q. In running an angle line?
A. Yes sir.
Q. Always?
A. It was in this case.
Q. It was in this case?
A. Yes sir.
Q. How does this differ from the ordinary case?
A. It doesn't differ from the ordinary case; that is the usual method.
Q. That is the usual method?
A. Yes sir.
Q. The usual method was followed in this case?
A. Yes sir.

267 Q. I think that is all. You will examine these maps afterwards—oh, by the way, I will ask you now, have you got the minutes here so that you can tell me definitely now the grade of that road in the vicinity of Hanging rock?
A. The profile is here.
Q. Just turn to Hanging rock, we will make that the starting point.
A. Just please repeat the question.
Q. Well, I just asked you to turn to that, I haven't asked the question yet?
A. Yes, sir; I have it.
Q. Now, from that point, Hanging rock, just give me the grade along for two or three miles above it?
A. Well the grade is—Hanging rock is station 633 of the final line staked, and the grade from there up is one-tenth of one per cent., to station 667, about——
Q. That is, it is a raising grade?
A. A raising grade of $\frac{1}{10}$th of one per cent.
Q. Yes, going up?
A. Going up the canyon, to station 667; to station 739 the rate is $\frac{37}{100}$th of one per cent. rising.
Q. That is about one-third of one per cent.?
A. One-third of one per cent. From station 756 to 771 the grade $\frac{4}{10}$ of one per cent. rising. From 771 to 790 the rate is $\frac{46}{100}$ths of one per cent. rising.
Q. Now, how far is that you have gone up Hanging rock?
A. Three miles.
Q. Three miles; well, run it up a mile further, if you please
A. From station 790 to 808 the rate is $\frac{29}{100}$ths of one per cent. rising.
Q. Less then a third of one per cent.?
A. 808 to 834 the rate is $\frac{61}{100}$ths per cent. rising? From 834 to 850 is a level grade; that is a little over a mile further.
Q. Now, you have got way up above the North fork, haven't you?
A. Yes sir.

268 Q. Well, that is as far as I care to go up there; now go back to Hanging rock on the profile map, what number is Hanging rock?

A. Station 633 on this profile.

Q. 633; 632 would be how far below that?

A. One hundred feet.

Q. 100 feet; what is the grade from 632 to 633?

A. One-tenth of one per cent.

Q. One-tenth of one per cent.; and now for the next one hundred feet below that?

A. Station 32 to 31.

Q. Yes.

A. One-tenth of one per cent.

Q. $\frac{1}{10}$; how far down does that $\frac{1}{10}$th of one per cent. last?

A. It stops at station 31.

Q. Well, from 30 to 31?

A. That is $\frac{6}{10}$ths of one.

Mr. HARKNESS: Do you mean 30 or 630?

A. 631.

Mr. HENDERSON:

Q. From station 630 to 631 what is it?

A. Five-tenths.

Q. Five-tenths of one per cent.?

A. Yes sir.

Q. About one-half of one per cent.?

A. One-half of one per cent. That grade extends down to station 618.

Q. That grade extends down to station 618?

A. Yes sir.

Q. And how many feet is that from Hanging rock?

A. That is 1,500 feet from Hanging rock.

Q. Well, then, take the next section below that, what is it?

A. From 618 back to 602 the rate is one and two-tenths per cent.

Q. One and two-tenths just slightly over one per cent.?

A. From station 602 to 601 plus 50 the rate is 1 $\frac{64}{100}$ths.

Q. How far have you got now from Hanging rock?

A. About a little over a half a mile.

Q. A little over a half a mile, yes, well, I only cared to go down a half a mile below Hanging rock; those are the exact figures, are they?

A. Yes, sir; these are the exact figures.

269 & 270 Q. Of the grade; that is all. Oh, by the way, is that according to the route as it is laid on the southeast side of the river?

A. Yes sir.

Q. That isn't according to the route that was laid on the northwest side of the river?

A. No sir.

Q. According to that first line?

A. No sir.

That's all.

Redirect examination by Mr. HARKNESS:

Q. Mr. Baxter, you were shown No. 1, and asked if it contained angle lines and straight tangent lines; what does that book contain in the way of lines?

A. It contains angle lines and curve lines.

Q. Well, how far do the angle lines run from Provo?

A. Well, I will have to look at the book to see.

Q. Well, I understood you to say five and a half miles, is that approximately correct?

Mr. HENDERSON: The angle line or the curved line?

Mr. HARKNESS: Yes, the angle line run five and a half miles from the station.

A. Three miles I think I said.

Q. Three?

A. Five, that is right.

Q. I had it five and a half?

A. Yes, I think that is right.

Q. Is that in an open country?

A. Yes sir.

Q. In an open country can the curves be put in from the angle line in the office?

A. Yes, sir they can.

Q. After five and a half miles what kind of a line is contained in that then, or after five miles, or whatever it is?

A. Well, sir: there is also a curved line covering this same ground in this same book.

Q. Well made later?

A. Yes sir.

Q. I am speaking of the first notes?

A. Oh, the first notes, please repeat the question.

The COURT: Read the question, Mr. Reporter.

Mr. HARKNESS: When you got five miles from Provo ac-
271 cording to those first notes, what kind of a line did you run or locate?

A. Some of it is angle line I see.

Q. How far did the angle line continue before you got to any curve?

A. Well, I see angle line up to station 705 here.

Q. How far is that?

A. About thirteen miles.

Q. Thirteen miles, is it angle line all the way up to there?

A. There is located line up to station 380.

Q. 380, how far is that?

Mr. HENDERSON: He didn't answer the question that you asked him, did he?

A. The angle line begins at 535 after location and turns up continuously to station 705 or 7.

Mr. HARKNESS:

Q. Now, you said there were curved lines in there; when were they put in?

A. They were put in after the angle lines were run.

Q. Now, you have said that you first went up there and then went back, did I understand you rightly?

A. Yes sir.

Q. You first went up a certain distance——

A. (Int.) Then I come back and located.

Q. How far did you go up the first time?

A. I went about five miles, to the mouth of the canyon.

Q. You have been shown Book 465, and under date of May 11th 12th, 13th, 19th, and 25th, you stated certain parts were run there; was that the second time you went over the line or the first time?

A. The second time.

Q. That was when you was coming back the second time?

A. Yes sir.

Q. What kind of a location or line did you make then?

A. That was a curved line.

Q. Now there is a second set of notes, as I understood you in that book that is later than the first angle notes?

A. In Book 465?

272 Q. Yes, the Book One, which is it?

Mr. HENDERSON: Book One.

A. Yes, sir; there are two sets of notes in Book 1.

Q. Is it in Book 465 that is marked—no, it is on Book No. 1 marked "superceded" as I understand you?

A. Yes sir.

Q. "By later notes"?

A. Yes sir.

Q. As I understand—who put on that word "superseded"?

A. Mr. Zulick.

Q. You were examined yesterday in regard to various dates in some book, and I don't remember—yes, it is Exhibit 2: do you know what that is?

Mr. HENDERSON: Well, here, it was 464; here it is. He has it now.

Mr. HARKNESS: That is Book 464, is it?

A. Yes sir.

Q. You were examined in regard to *to* notes at various stations running I think from July down as late as November; one of the stations I haven't got, but it commenced at station 347, and then there is 548, 545, 739, 738, 739, plus 50, 738 plus 46, and then it runs to 406, 682, 707 plus 40, and 707 plus 34, and 695 plus 33, which had a note August; you gave various dates in regard to that; what kind of work was that?

A. That was refitting the line; going over and refitting to the ground more closely than the original line had been run.

Q. Was that after the graders had commenced work on the south side?

A. Yes sir.

Q. Then that wasn't the first survey?

A. No sir.

Q. Nor was it the second, but simply a final re-examination?

A. A final readjustment of the located line.

273 Q. To what extent did these alterations or changes go?

A. I don't think any changes exceeded a horizontal variation of more than twenty feet, probably, the extreme, and minimum only three or four feet.

Q. If you changed your center line twenty feet it would be within any 200 feet of location all of it?

A. Yes sir.

Q. I wish you would look at Exhibit "4," which is the little blue print there, and I will show you—compare with that Exhibit A of the complaint filed in this court on the 12th of September, and ask you if they are identical?

A. Yes, sir; they are identical.

Q. Now take Exhibit 4, or the little blue print of the enlarged print of the Ferguson ground, and compare it with Exhibit 5; I ask you to compare Exhibit 4, which is the map of the Ferguson land, which you say is identical with that in the complaint, with the same line there on Ferguson's land, on Plaintiff's Exhibit 5, and see whether or not they are identical?

A. Yes sir, they are identical in so far as the line crossed the Ferguson land or on the Ferguson land.

Q. Then the changes to which you referred yesterday in Book 464 wouldn't effect the Ferguson land?

A. No sir.

Q. In whose handwriting is Book 464, well, I will say Def'ts' Ex. 2?

A. Ex. 2, yes sir.

Mr. HENDERSON: I asked him about that and he stated yesterday.

A. That is mostly in Mr. Norris's handwriting, and a part of it in Mr. Lupford's.

Mr. HARKNESS:

Q. Mr. who?

A. Mr. Lupford.

Q. Did Norris do the work to which you referred yesterday in that book?

A. These dates, yes, sir.

Q. I see the stations in regard to which you was examined, on Exhibit 2, yesterday go down to station 423 plus 60; where would that be?

A. About eight miles up from Provo, 423 plus 60.

274 Q. About eight miles?

A. Yes sir.

Q. How far from the mouth of the canyon?
A. Two and a half miles.
Q. How far below the Ferguson land?
A. Four miles.
Q. One of the stations you have spoken of, and I think the farthest one up, 739 plus 50, if I get it right, where would that be?
A. Three-quarters of a mile above the Ferguson land.
Q. Three-quarters of a mile above the Ferguson land; what stations does the Ferguson land include, extreme stations?
A. About 645 plus 50——
Q. 645 to 650?
A. No, 645 plus 50, to station 692.
Q. In changing the line from the northwest side of the river to the southeast there, did you go into any different Government subdivisions than the other line did?
A. No sir; not on the Ferguson land.

Mr. HENDERSON: Just a moment, I object to that as immaterial.
The COURT: Read the question, Mr. Reporter.
Question and answer read.
The COURT: Well, the question was answered.
Mr. HENDERSON: Well, I will move to strike it out; I want to save the record, as immaterial.
The COURT: What is the materiality Judge Harkness?
Mr. HARKNESS: Oh, it bears upon the question of whether their first trial line, or the first located line, they simply changed over the river, remaining in the same Government subdivision, and involving no difference to the Government or to the occupant.
Mr. HENDERSON: If it is for that purpose I object to it and insist upon it and ask that it be stricken out. I say that it doesn't make any difference; it cannot be possible that the locus of an action of this kind can be changed upon any such plea as that.
Argued to the court.
275 Q. The COURT: It is redirect examination; the motion will be overruled.
Mr. HENDERSON: Give us an exception.

Mr. HARKNESS:

Q. I think you have already stated that the line as located on Exhibit 4, which you hold in your hand, and that change connected at both ends, with other parts of the line; have you so stated?
A. I think so, I think I said it.
Q. Is it the truth; is it a fact?
A. Yes, sir; that is the fact.
Q. And you have spoken of some grading I think being done on the south side, where was that?
A. At the point above the Hanging rock.
Q. And how far below the Ferguson land?
A. I think it extended up to the Ferguson land, right to the west line of the Ferguson land?
Q. Your attention was called to some erasure on page 5 which I

think is in Book 465, I haven't the book here (procures the book referred to) at what point in the line, or to what point in the line does that erasure relate?

A. It relates to a point between Provo and the mouth of the canyon.

Q. How far down from the mouth of the canyon?

A. Two miles and a half this side of the mouth of the canyon.

Q. Is that in surveyed land?

A. Yes, sir; on surveyed land.

Q. You spoke about a note somewhere, in some of these books about a proposed dam site, I don't know that I have the place, but it was somewhere near Hanging rock?

Mr. HENDERSON: At Hanging rock.

Mr. BAILEY: Station 637 plus 90?

A. Yes, at station 638.

Mr. HARKNESS:

Q. 638, you say Hanging rock is station 633 of the present line?

A. Yes sir.

Q. How far was 638 from the Hanging rock?

A. It was right at the Hanging rock, on that line.

Q. On that line?

A. Yes, sir.

276 Q. The 633 is on the south line?

A. On the last line.

Q. Who made that note?

A. Mr. Collier.

Q. Then you spoke of a note there somewhere, crossing some line of stakes?

A. Yes, sir; below that.

Q. Where is that?

A. A thousand feet below Hanging rock.

Q. A thousand feet below Hanging rock; what was there that you found?

A. Why, a line of stakes.

Q. Describe them; how did they run, what were they, a line of stakes running how, up and down the river, or——

A. Up and down the river.

Q. How far from the river?

A. I don't remember; quite close though, because our line was pretty close to the river at that point.

Q. Well did your line run on the line of those stakes?

A. Crossed it.

Q. Crossed it about a thousand feet below Hanging rock?

A. Yes sir.

Mr. HARKNESS: I believe that is all your honor. Some things of course, I have got to recall this witness on rebuttal.

The COURT: Anything further?

Mr. HARKNESS: Oh, one thing.

Q. I told you yesterday to get the length of this Ferguson land, and the acreage, this strip; have you done so?

A. Yes sir.

Q. What is the length, about?

A. Well, I have forgotten the length, about 4,550 feet, and contains twenty acres and nine-tenths.

Q. 4,950?

A. 4,550.

Q. And contains how many acres?

A. Twenty acres and nine-tenths.

Q. Twenty acres and nine-tenths; that is all.

277 Recross-examination by Mr. HENDERSON:

Q. You told Judge Harkness, in answer to him, that that Book One, turn to it, you have got it in your hand; you have got it, have you?

A. Yes sir; I have got it.

Q. Now, what part of that book contains the first survey?

A. The first part of the book, beginning at page 6.

Q. And up to where, I mean now the first?

A. (Int.) Work that was done on that line?

Q. Yes, the first running over that line?

A. Page 6 to 24.

Q. And that covered up to what stations?

A. 207, the last point up there.

Q. And how far up is that?

A. Five miles and a half.

Q. Five and a half miles; now up to that point it was all angles?

A. Yes sir.

Q. Now, is there any angles, is there any survey of any angles further up than that?

Mr. HARKNESS: Judge, I submit the witness has been all over that.

Mr. HENDERSON: Well, I know it.

The COURT: You have had a great deal on angles, but whether that——

A. (Int.) Yes, sir, there was some angles above that.

Mr. HENDERSON: There were some angles above that?

A. Yes, sir.

Mr. HENDERSON: The witness in answer to Judge Harkness changed his testimony on that subject, and I have got a right to call his attention to it again.

Mr. HARKNESS: That the whole book was superceded by another book?

Mr. HENDERSON: Yes, I understand that; it is true that *that* the first line that was run up there say up as far as Hanging rock was an angle line, wasn't it?

A. There was a located line run up before the angle line was continued.

278 Q. Now, I ask you again, isn't it true that the first line that was run up to Hanging rock was an angle line?

Mr. WEDGWOOD: I submit he has answered the question. He said an angle line was run up part of the way and then the surved lines were put in, and then the angle line run up again.

Mr. HENDERSON: And I submit he has answered directly opposite to that at another time.

The COURT: Let him answer the question. Read the question, Mr. Reporter.

Question read.

A. I don't know whether I can answer that or whether I understood it thoroughly.

Mr. WEDGWOOD: The question is misleading. It is an endeavor to put words in the witness' mouth, what is in Judge Henderson's mind.

Mr. HENDERSON: Of course, that is why I use the words.

The COURT: The witness says he can't answer.

Mr. HENDERSON:

Q. You say you can't answer that?

A. I say I can't answer it in that form.

Q. Well, what form do you want it in so that you can answer it?

A. Well, it will have to be explained. I can't make a direct answer to that.

Q. Well, where is it indefinite in your mind?

A. There probably was an angle line run up in advance of the curved line.

Q. Well, that is just what I asked you.

A. And some curved lines were run in advance of the angle line ahead of it, and when the line was got up there, it was partly angle line and partly curved line.

Q. Certainly, but the work that was carried ahead was an angle line wasn't it?

A. No sir.

Q. What part of that line was first surveyed as a curved line?

A. Well, it wasn't first surveyed as a curved line.

279 Q. That is what I ask: tell me if you can a rod or section of that road from Provo, or here where it leaves the main line, up there to Hanging rock that was first surveyed as an angle line; and tell me where it is?

A. Well, most all of it was first surveyed as an angle line.

Q. Well, that is what I asked you in the first place, and you said so, and you afterwards said it wasn't, and now I want to settle that controversy if I can?

A. Well, I think there was an angle line run in advance of all curved lines.

Q. Yes, now, after examining the book and considering it all over, you now state that you think an angle line was first run over the whole of that line or that route from here to Hanging rock?

A. No sir; not if I understood that last statement. It was run in advance, advance of the sections; we had angle lines in advance, but we never run all the way up.

Q. Yes, what I mean is you run angle lines up to a certain point?

A. Yes sir.
Q. And then stopped?
A. Yes sir.
Q. And you come back and run curved lines?
A. Curved lines, yes sir.
Q. But when you went on you would go first — an angle line?
A. Yes sir.
Q. The first survey of every foot of that line was an angle line?
A. I think so, yes.
Q. Now turn to Exhibit 2, did you tell me yesterday in reply to my questions that that was the notes from which the first map that was made in December was prepared?
A. The notes in this book.
Q. Yes?
A. I don't think I testified to any map that was made in December, I don't remember.
Q. You heard Mr. Zulick testify, did you?
A. I heard some of his testimony.
280 Q. You heard him state when that map was made, didn't you?
A. Yes, I think I did.
Q. And you heard him identify that book as the one he made it from, didn't you?
A. Yes sir.
Q. And didn't I ask you if that was true that that was the book that was turned over to him from which that map was made?
A. This book was turned over to him and he made most of the maps from it. I know that some of the notes don't correspond with the notes in this book.
Q. Now, I called your attention to certain dates along there in November there in the book there, can you turn to them?
A. I think so.
Q. October and November?
A. Here is a date, October 30, '96.
Q. Where is that? What station?
A. 754 plus 76.
Q. Where is it?
A. A little over a mile above the upper end of Ferguson's place.
Q. Just above Ferguson's in October?
A. Yes, sir.
Mr. HARKNESS: Did he say just above?
A. A little over a mile above.
Mr. HARKNESS: You said just above.
Mr. HENDERSON: Yes, I said just above, in reply to a mile.
Q. How far is it from here *to* there?
A. From here up to station 754?
Q. From here to Ferguson's land?
A. Oh, from here to Ferguson's, I guess it is thirteen or fourteen miles.
Q. Thirteen or fourteen miles, and this is a mile above his land?
A. Yes sir.

Q. Now, do these notes locate the line upon the map that they put in evidence here, the large map?

A. Yes, sir; that note is on the map.

Q. Is on the map that they put in?

A. It is on this map.

Q. Of the present line?

A. Yes sir.

281 Q. Turn to the stations back; now that is the continuous notes, isn't it right along?

A. Yes sir.

—. Yes, running from station to station, is that the line as it is now laid through Ferguson's land?

A. Yes sir; here are the notes.

Q. Well, is that the line as it is now laid through Ferguson's land?

A. 695 plus 33, shows a note that is just at the upper end of Ferguson's land.

Q. Ain't that the notes on the north side of the river?

A. No sir.

Q. How is that?

A. No sir.

Q. Exhibit 2, have you got Exhibit 2?

A. No sir, it is the notes of the line on the south side.

Q. The line as it is now laid?

A. Yes sir.

Q. Now you say that that is not the first notes; where are they, you say there were notes before that; where are they?

A. I don't know: I guess they are amongst those books.

Q. Well, I want to see it, I have been asking for it all the time?

A. Here is a note of August 21st, on the upper end of the Ferguson land, which is the same shown on this map.

Q. Judge Harkness asked you if that was the notes of that, the notes of that first survey, and you said it was not, it was copied from others, and taken from others, and that these are mere corrections. What is there to indicate that it was a mere correction?

Mr. HARKNESS: I didn't put it in that way.

The COURT: Well substantially that.

Mr. HARKNESS: I asked him if the line had previously been run and these were the notes of corrections, and he said it no place exceeded 20 feet.

Mr. HENDERSON:

Q. Well, I will put it in that way then, I think that is correct the way Judge Harkness states it. Where is there anything that indicates that?

A. Indicates what?

282 Q. Indicates what he has just said, that there was, that there was taken, the general route and course is taken from other notes made before that time, and that these are simply to make little minor corrections that would simply vary the line inside of the hundred feet?

A. Well, I know these were the last notes we took and are the notes of the line as it is now staked.

Q. Where are the first ones?

A. Scattered through the previous books.

Q. Well, I want to see the first notes, the notes of the first survey on the north side of the river.

A. Well, we have had them here all forenoon.

Q. Of the south side of the river?

A. We had those here yesterday.

Mr. HARKNESS: I suppose you will have to go back to June, Mr. Baxter.

Mr. HENDERSON: To June.

Mr. HARKNESS: Yes.

A. Here is some June 29th.

Mr. HENDERSON:

Q. On the south side of the river?

A. Yes sir.

Q. What station?

A. 548 plus 012; 545 crossed out.

Q. It is in that same book?

A. Yes sir.

Q. What is it?

A. 545 crossed out.

Q. Crossed out?

A. Yes sir.

Q. And that was made on June——

A. 29th yes.

Q. And where does that make it run, is that in Ferguson's land?

A. That is below Ferguson's land.

Q. That is below Ferguson's land?

A. Here is some on the Ferguson land, July 8th, '96, station 671 plus 67.7.

Mr. HARKNESS: What date is that?

A. July 8th, '96.

Mr. HENDERSON: Where is that on the blue print?

A. There, (ind.).

Q. And what date is that?

A. July 8th.

283 Q. It is on—just indicate there so it will go into the record, well state what is near there?

A. It is 400 feet 500 feet below the mouth of the South fork.

Q. Yes, 500 feet below that, and how much does that differ from the last notes?

A. That is the same as the last notes; those are the last notes.

Q. It is exactly the same?

A. Yes, sir; they were in that change on that point.

Q. This survey was copied right on, a continuous survey—I think you have stated that in that book——

A. (Int.) Well, I don't know whether we worked——

Q. (Continuing:) It was used for continuous work?

A. Yes, we skipped around though, different days.
Q. What was the grading done for on the south side?
A. To build a railroad.
Q. Was it to build a railroad?
A. As far as I know that was the object.
Q. As far as you know?
A. Yes sir.
Q. And you have no idea of any other object in changing over and doing some grading on the south side?
A. No sir.
Q. Did you send in your notes once in a while?
A. Of what? What field-notes were they?
Q. Why, field-notes that you were taking in the field?

Mr. WEDGWOOD: Why, if the court please he went over that time and time again, and pinned him down to days and dates.

The COURT: I think that was gone over Judge. I don't want to shut off any examination.

Mr. HENDERSON: If the court please I haven't asked him this question, or anything like this before. I have asked him when he turned in the notes at the end. I haven't asked him when he sent in the field-notes from the field.

The COURT: Answer the question.

A. I can't remember when I sent them in.

284 Mr. HENDERSON:

Q. Don't know; does your book indicate when they were sent in?
A. No sir, they don't.
Q. Were you urged to send in your field-notes every little while for the purpose of getting up a map?
A. I don't remember that I was.
Q. Don't remember that you was; you testified before, did you?
A. Yes sir.
Q. Did you testify at that time that they were urging you constantly to send in your notes, because they were in a hurry to get up a map?
A. No sir, I don't think I did.
Q. You don't think you did testify to that. If you did testify to that it would be correct, wouldn't it. Your recollection would be just as good at that time as it is now?
A. Probably it was.
Q. Yes, and didn't you know, and don't you know now that that grading was done over on the south side for the purpose of provoking a controversy with the Nunn people, for the purpose of settling the rights there?
A. Why, I think I know it now, yes.
Q. You think you know it now, you think you do understand that that was what the men were taken over there for?
A. Yes.

Q. Was to provoke a controversy?

Mr. HARKNESS: One moment, I move to strike that out and object to the question and move to strike out the answer.

The COURT: Let the witness answer as far as he knows what the purpose was.

Mr. HARKNESS: In the first place it isn't cross-examination of anything we examined about, and what he understands is not evidence.

Mr. HENDERSON:

Q. So far as you know what was the purpose of it?

The COURT: He can answer that. He has answered it once. To build a railroad, as the court remembers.

285 Mr. HENDERSON: Well, if he has answered it, if the answers before are taken to it.

The COURT: Read the question Mr. Reporter.

Question read: To build a railroad, and also to secure rights, I suppose.

Mr. HENDERSON:

Q. And also to secure rights; you don't know then that it was done for the purpose of provoking a controversy?

Objected to as not cross-examination.

The COURT: Objection sustained.

Mr. HENDERSON: Give us an exception.

Q. Now who was it you said made that note as to the dam.

A. Mr. Collier.

Q. Mr. Collier; he was the man that made the book, wasn't he?

A. Yes, sir, he made the notes.

Q. Made there in the ordinary way of noting the topographical conditions there?

A. Yes sir.

SAMUEL NORRIS, recalled for plaintiff.

Examined by Mr. HARKNESS:

Q. Mr. Norris, I wish you would take the book that is marked "Def'ts' Ex. 2;" you testified yesterday in regard to running a line on this changed line south of the river; let me ask you who made the notes in the field book which you have in your hand?

A. I made most of them, and Mr. Lupford a part of them.

Q. You said yesterday that when you went there July 1st, there had been a line run?

A. Yes sir.

Q. Now what does this work of your notes on that book represent?

A. It represents the line run at the time I came up there, the line that was being run.

Q. I see some of that work is said to extend down to October and November, I think?

A. Yes sir.

286 Q. What class of work was that?

A. That was the final location

Q. What?

A. The final location of the line, the present line.

Q. Well, what do you mean by final location, what change did you make if any, did you make in it previous?

Mr. HENDERSON: I object to what changes, if any, were made in the previous. I don't think it is on any account, if the court please. He says it is the notes of the final location, and how that may change from any other line, unless it was the one that was run on the north side of the river——

Mr. HARKNESS (int.): He has already stated that a line was run through Ferguson's land at least before he went there.

Mr. HENDERSON: I know, but what is the difference? He says this is the notes of the final location.

Mr. HARKNESS:

Q. What do you mean by the final location?

A. Why, of the line located as it is expected.

Q. What?

A. Line located as it is expected to be built.

Q. Take the Ferguson land which is represented on Plaintiff's Ex. 4, what did you do on that land after the first of July?

Mr. HENDERSON: I object to that, it has already been gone over. He asked him expressly in detail.

The COURT: This same witness?

Mr. HENDERSON: This same witness; said he commenced there about the first days of July, I believe it was the first day of July, and he went over it what he did.

The COURT: There was some evidence in regard to what kind of testimony, I don't just remember what the testimony was, though. Answer the question.

Mr. HENDERSON: Give us an exception.

A. I carried on the final location where Mr. Baxter left it on the Ferguson property.

287 Q. The north end?

A. The east end, I expect, or northeast end, and carried it across the Ferguson property.

Mr. HARKNESS:

Q. What time did you complete the work across the Ferguson property?

A. As far as I know the property between his fence lines I completed the line on the 8th of July between his fence lines.

Q. Where was your work from that time forward down until November?

A. It was both east and west of the Ferguson property.
Q. Come clear down to here, Provo?
A. Yes sir; to within a short distance of Provo.
Q. What did you do, what class of work did you do? What changes if any did you make in the line you found there?
A. Not any great changes. There were places where the cuts exceeded the fills, or fills exceeded the cuts, and equalized them, and will change it from nothing to 35 feet probably.
Q. What do you mean, the center line?
A. Yes sir, put the spirels on the curves.
Q. Well, now, do these notes represent that work?
A. Yes sir.
Q. Did you hear various stations called off to Mr. Baxter yesterday here?
A. Yes sir.
Q. With the dates in that book?
A. Yes sir.
Q. Is that the class of *of* work that was done at those stations, the class you speak of?
A. Yes sir.
Q. It was corrected simply, simply corrections?
A. Yes sir.
Q. Give the maximum what you in any place changed the center line.

Mr. HENDERSON: He testified in relation to that yesterday, if the court please.
The COURT: My recollection, the recollection of the court is that he did right opposite Hanging rock, or near Hanging rock, as to whether he did any in there, I don't remember.
288 Mr. HENDERSON: He was asked this question as to how much those changes were and he said that they were minor changes.
Mr. HARKNESS: I don't know whether I asked in regard to the whole. There has been an examination since in regard to that note book, of Mr. Baxter's, who didn't make it, and I think my question yesterday did not extend to the ground covered by that note book.
The COURT: Answer the question.
Mr. HENDERSON: Note an exception.

A. There wasn't any place on the entire change that it was changed as much as fifty feet. The usual change would average about twenty feet, something like that.

Mr. HARKNESS:

Q. Can you recall any place where it was as much as fifty feet?
A. No sir.

Cross-examination by Mr. HENDERSON:

Q. Change from what?
A. From the first line.

Q. From the first line?
A. Yes sir.
Q. Look at—I show you a map here which is marked "Superceded by map approved July 12th, 1897;" I show you that map and ask you if the line changes from that map?
A. Yes sir.
Q. The changes are very great from that map ain't they?
A. Not very great, possibly two or three hundred feet.
Q. Two or three hundred feet, it is on the other side of the river, ain't it?
A. Yes sir.
Q. It doesn't cover on the Ferguson land any of the same land does it?
A. Not that line, no sir.
Q. It was simply changed from some other preliminary survey?
A. Yes sir.
Q. Yes, and it wasn't a change from any previous located survey was it?
A. Yes sir.
Q. Was it?
A. Yes sir.
289 Q. What? What located survey?
A. Located survey that Mr. Baxer located.
Q. When did Mr. Baxter, when was it located?
A. It was located before I came there.
Q. A located survey?
A. Yes sir.
Q. Who located it?
A. Mr. Baxter.
Q. Mr. Baxter located; what is a located survey?
A. A located survey is a line.
Q. Is every line a located survey?
A. Yes sir.
Q. Are you an engineer?
A. Pretend to be.
Q. Do you say that in railroad work that every line that is run is a located survey?
A. It is a located line of some kind.
Q. Yes, that is, it is a fixed place?
A. Yes sir.
Q. As a line?
A. Yes sir.
Q. But it isn't located as the fixed and final place for the road?
A. No sir it is never finally located.
Q. No, it is never finally located?
A. Not after it is built.
Q. Not after it is built, I see, there are washouts and things of that kind that takes it away?
A. No, sir there are changes.
Q. Yes, sometimes there are changes; so that it never gets to be a fixed and located line except it is put on the map, and you don't

make any distinction between the angle line that was run up the road here, which was the first one; that was a located survey, wasn't it?

A. It was a location, a located survey, yes sir.

Q. It was a located railroad line was it, is that your idea?

A. The line I speak of is a located railroad line.

Q. I am talking about this angle line that was run up there, was that a railroad line?

290 A. I am not talking about the angle line.

Q. Well, is the advance angle line a located line?

A. It may be a preliminary location.

Q. Is it a located line?

A. It isn't a finally located line.

Q. No it is a located line, that is what I am asking you. Do you know of any other finally located line on that road except the one that is contained in the notes in the Exhibit 2?

A. No sir.

Q. No, there are the notes of the finally located line, aren't they?

A. This one, yes sir.

Q. The one that you have got there, the two?

A. Yes sir.

Q. And there is none besides it is there?

A. Of a located line?

Q. Of the finally located line?

A. No sir.

Q. So that one; you say it is changed in minor particulars, you mean by that that there had been a preliminary survey run through there, and that in going back over it it was determined to make minor changes?

A. Yes sir.

Q. And those minor changes were put down as the survey itself, and the others crossed out, that is true, isn't it?

A. Not as I understand it.

Q. Let me see if I make you understand my question; for instance, suppose that through the Ferguson land Mr. Baxter had run his line through there in a certain way, on the south side now, and the book had contained the minutes of it running through there; it contains various angles running through there; suppose that in going back over the line it was considered best finally to change that in minor particulars, running it a little different from what he had made it there; isn't it true that the lines, the notes of the first survey are crossed out from these notes?

A. They are yes, sir.

Q. And the new survey put right in as the original notes?

A. Yes sir.

291 Q. That is the scheme, wasn't it?

A. Yes sir.

Q. And the new survey located, and the one that is located as the final location?

A. Yes sir.

Q. And that is the sense in which you mean that there were minor changes made, ain't it?

A. No sir.

Q. What other sense?

A. He had a curved line, a line of curves run.

Q. Well, I don't mean now that it is an angle line; I don't suppose he made an angle line there first, did he?

A. I don't know about that.

Q. But I am not supposing about that; I am supposing that he made a curved line?

A. Yes sir.

Q. And one that he supposed might be correct?

A. Yes sir.

Q. But it was finally determined to go back there and change it in minor particulars?

A. Yes sir.

Q. Yes; that original survey would be simply crossed out?

A. Yes sir.

Q. And the new survey put in?

A. Yes sir.

Q. And that would be the one that was adopted in the final adoption of the road?

A. Yes sir.

Q. And that is the sense in which you mean that it was changed in a minor way?

A. Yes sir.

Redirect examination by Mr. HARKNESS:

Q. How was that line marked on the ground in which you made these changes?

A. Stakes every hundred feet or oftener.

Q. How was it staked on curves?

A. Every fifty feet I believe.

Q. Some of your work was in cross-sectioning I believe, preparing for the graders?

A. Yes sir.

292 Q. While you was there?

A. Yes sir.

Recess taken until 2 o'clock p. m.

Resuming session.

E. J. YARD, recalled for the plaintiff.

Examined by Mr. HARKNESS:

Q. I think it was yesterday or day before counsel was cross-examining you, you were asked if you had, is your report in regard to this line to the general manager was in writing, you didn't know but what it was a letter; have you looked for such a letter?

A. Yes sir.

Q. Have you such a letter?

A. No sir.

Mr. HENDERSON:

Q. What form was it in?

A. I presume it must have been in some, in a verbal communication.

Q. It was verbal, you can't say anything more about it now than you could the other day?

A. No sir.

Q. About when it was?

A. No sir.

Q. Or what it was?

A. No sir.

Mr. HARKNESS:

Q. Was the general manager here frequently, state how that is?

A. He was here during that summer several times, yes sir, and to the best of my recollection the matter was called to his attention verbally. I can find nothing in the files, no written statement. And I wish to add further, that it was a usual occurrence, changes of this character.

Mr. HENDERSON: Well, I object to that, and ask to have it stricken out; what was usual.

Mr. HARKNESS:

Q. Did he afterwards?

Mr. HENDERSON: The court didn't rule on it.

Mr. HARKNESS: Excuse me.

The COURT: Objection sustained.

Mr. HARKNESS:

Q. Did you afterwards, or at any time at all, have any in-
293 structions about commencing work on this changed line?

A. On this particular changed line?

Q. Yes?

A. Not that I remember, no sir.

Q. Did you commence any work over there?

A. We commenced work on the line, commenced first on the north side, and then changed to the south side.

Q. I mean on the south side, how did you happen to commence there?

A. Well, I don't know; my instructions covered either side, whichever I saw fit to start work.

Mr. HARKNESS: While this witness is on the stand I desire to offer the judgment-roll as against Nunn, Holbrook and the Telluride Power Company.

Mr. BROWN: You offer what?

Mr. HARKNESS: The judgment-roll, consisting of the complaints, answers, findings of fact and law, judgment, and the judgment or remittitur of the supreme court, and to identify it by this witness, the land to which it related.

Mr. HENDERSON: For what purpose?

Mr. HARKNESS: I offer it for anything it is useful for, and at the present time to show that this company has prosecuted to judgment a suit in regard to land adjoining this, on this changed line.

Mr. HENDERSON: It is objected to, if the court please, as immaterial and incompetent in this case. There is no pleading in this case under which any such evidence as that can be offered surely. And counsel saying in answer to the question what it is put in for, that it is for anything for which it can be used; now of course that is a very indefinite statement. I think we are entitled to know at least what the purpose is for for which they offer the evidence, but accepting the statements as they make it, we object to it as being immaterial and incompetent. There is no pleading in the
294 case under which they can make any showing of any such thing as that. There is no estoppel pleaded, or judgment of estoppel, no pleading of *res adjudicata*, and that in order to be shown must be plead. If there has been a former judgment points *in* that in any way it should be set out, and the parties should be notified of what it is.

Mr. HARKNESS: A judgment never has to be pleaded. The old doctrine was when it was pleaded or offered in evidence it was a bar, but it isn't now; but this last case is not offered as a bar for the reason that there is nothing to offer it as a bar to shown on the part of the defendants yet, but I offer it as I stated, to show that this company has adopted this line, has prosecuted a suit to judgment upon this changed line on the south, and upon lands adjoining and for which this suit was commenced. If at some future time it should be relevant for some other purpose I may offer them for those purposes. Of course I have no objections to the court holding it under advisement, but I wanted to offer it before we rest.

Argued to the court by Mr. Henderson and Mr. Harkness.

The COURT: Well, the court will examine that matter. At the present time I am undecided as to its materiality, and desire to look into it.

Mr. HENDERSON: What does the court rule.

The COURT: I say the court will consider that matter. At the present time I am unable to see the materiality of it. I desire to look the matter over. As the court understands it is introduced for the purpose of showing the connection of the plaintiff in proceeding with the other work on that line; and you will leave it with the court. I will look over it this evening.

Mr. HARKNESS: Now, I wanted to prove by this witness the identity of this land as adjoining this on the southwest; will that be admitted?

Mr. HENDERSON: How is that?

295 Mr. BROWN: It lays between the land in suit and the Hanging rock?

Mr. HARKNESS: Yes.

Mr. HENDERSON: Oh, yes, so far as that is concerned.

Mr. HARKNESS: As joining the Ferguson land.

Mr. HENDERSON: In so far as the court is going to take that under

advisement, we want considered along with it, that we have here the proof that that case is now pending in the Supreme Court.

The COURT: Well, I have so understood. I take that as a fact.

Mr. HENDERSON: We want that to be considered along with it.

Mr. HARKNESS: The appeal wouldn't affect this case at all. However that is a matter to be taken up: however I wanted to get this land identified.

Mr. HENDERSON:

Q. Now, Mr. Yard, I think you testified a few minutes ago that you occasionally went up this line.

A. Yes sir.

Q. What is the fact about how often you went up there during the summer?

A. I think not to exceed a half a dozen times.

Q. No, and I think you told us before that you couldn't tell, give us an idea about the times when you was there each time?

A. No, I couldn't.

Q. How about being there in the latter part of the summer?

A. I may have been there then.

Q. Was you there in July at all?

A. In July?

Q. Yes.

A. I could not say.

Q. You can't say that you was there at all in July?

A. No, sir.

Q. You have no such recollection that you could say affirmatively that you was there in the month of July?

A. No sir.

296 Q. Or August?

A. I couldn't say what month I was there.

Q. Well, you can't say whether you were there in August?

A. No sir.

Q. And can you say whether you were there in September or not?

A. No sir.

Q. Or in October?

A. No.

Q. Or November?

A. No sir.

Q. Now I think you said that you knew about the lands up that way, I think you said that you knew about where they run out of the surveyed lands, was that you or Mr. Baxter that said that?

A. I presume it may have been Mr. Baxter, I don't think I testified to that.

Q. You don't think you did?

A. No.

Q. Do you know anything about where that ran out of the surveyed lands?

A. No, I do not.

Q. You don't know about that?

A. No, sir.

Q. You don't know then, what is and what is not unsurveyed lands up there?

A. I know there is an unsurveyed portion, a portion of the country is on unsurveyed lands.

Q. On unsurveyed lands?

A. Yes sir.

Q. Well, do you know whether all the lands from very near the mouth of the canyon up are unsurveyed?

A. Only from maps on file.

Q. Well, I mean from investigation, and from learning from the proper channels as to whether the lands were unsurveyed lands of the United States or not?

A. Yes sir; I think I know that.

Q. Yes, you know that, and you know that all the lands lying up the canyon from near its mouth are unsurveyed lands of the United States?

A. Well, no; there is a considereble portion at the upper end of the canyon that is on surveyed lands.

Q. Well, I mean up beyond the Ferguson land for some considerable distance?

A. Yes sir.

297 Q. From near the mouth of the canyon until you get way up above the North fork, some point in there?

A. Yes sir.

Q. That they are all unsurveyed lands of the United States?

A. They were at that time, yes sir.

L. L. ZULICK, recalled for plaintiff.

Examined by Mr. HARKNESS:

Q. Mr. Zulick, when you were being cross-examined yesterday, you were asked to produce the copies of the profile filed, or map of profile filed, have you done so?

A. Yes sir.

Q. Is that the map that was exhibited here this morning?

A. Yes sir.

Q. Mr. HENDERSON: Now, I would like to have that identified.

Marked by reporter "Ex. A., D. H. R."

Mr. HENDERSON: Now if there is any question about the form of it, if it isn't offered by them, I want to offer it as a part of the cross-examination.

Mr. HARKNESS: I say we have no use for it, but you asked for it.

Mr. HENDERSON: Well, we offer it as a part of the cross-examination.

Mr. HARKNESS: I understand you made a statement yesterday that you desired to correct in regard to the filings?

A. Yes, sir.

Q. Just state to the court and jury what that is.

A. I was asked how many maps had been made of this line up

Provo canyon, and I said there had been two maps made and three filings, and I was asked which of the maps had been filed twice and I said the first one, but I was mistaken, it was the last one which was filed twice.

Mr. HENDERSON: Well, that is so, I had forgotten it. I knew it was the second one; the papers shows it was the second one.

298 Mr. HARKNESS: It was Exhibit 5, that was filed twice.

Cross-examination by Mr. HENDERSON:

Q. Mr. Zulick, the map that just been produced and put in evidence is the one that you testified here was made from the field-notes in Exhibit 2, was it not; it may refresh your recollection Mr. Zulick to look at the mark that the reporter made right on the outside at the time—well, if it is going to take any time I will withdraw that and ask another question, Mr. Zulick. This is the map that you referred to yesterday as the one that was in Salt Lake and that you would produce this morning?

A. Yes sir; and the first map made.

Q. And the first map made?

A. Yes sir.

Q. That identifies the map. The book is already identified.

Redirect examination by Mr. HARKNESS:

Q. When that first map was made, you made it from notes of survey?

A. Yes sir.

Q. What did those notes show as to the line whether it was an angle line or line of curves and so on?

A. A located line with curves.

Mr. HENDERSON: What is the object of that Judge?

Mr. HARKNESS: Why, Judge, you have been examining at great length here to ascertain whether it was an angle line.

Q. Well, what date was that map made, Exhibit A?

A. I think it was finished the third day of June, 1896.

299 Mr. HENDERSON:

Q. What was your testimony yesterday about when that map was made?

A. In May I said.

Q. In May?

A. In May.

Q. Oh, it was the second one that was made in December?

A. Yes sir.

Q. And was finished on the third of June?

A. Yes sir.

Mr. HARKNESS:

Q. The second making of the second one?

A. Yes.

Q. When was the second map there Exhibit 5 first made, you say it was filed twice?

A. October, or first days of November.

Q. And then later again in December?

A. Yes.

Mr. HENDERSON:

Q. Just a moment, what is the difference between the two maps, now I don't mean the—I mean what is the difference in the condition of the first map and the second one?

A. There are additional notes here that the Government asked for of point of spir*a*l, where they joined the circular curves, and the circular curves and spir*a*l again, and the tangents and the deflections.

Q. And that was made in October, did you say?

A. October.

Q. From what notes did you make that?

A. From field-notes received from Mr. Baxter.

Q. From Mr. Baxter?

A. Yes sir.

Q. Can you identify the books here?

A. I have identified it.

Q. No, the last one, I mean?

A. Yes sir; the last one I have identified.

Q. Well, just tell me what book it is. I had forgotten that if you did. See if it is among these. Just identify which the books are in which it is contained?

A. This is one of them.

Q. This is one of them; well, that is Def'ts' Ex. 2?

A. Yes, sir. This is another one.

300 Q. That is the balance of it is it?

A. Yes.

Q. And 465, those are the two, Mr. Zulick, if that map was made in October, 1896, can you tell me how it comes that it was filed in the land office at Salt Lake City in June, 1896?

A. Yes sir.

Q. Just explain what there is about that?

A. The original line was filed at that time, which was this first map, then the Government asked for amended certificates to show the line over unsurveyed land, or surveyed land separately; so we furnished this other map the first time it was made, and I don't suppose they considered that a new railroad line. It is simply an amendment of the map.

Q. Yes, now just wait a moment?

Q. Just a moment:

The COURT: Wait a moment, Mr. Zulick.

Mr. WEDGWOOD: You asked him if he knew, and he is telling you.

Mr. HENDERSON: Yes, he is telling what he don't know.

Q. Now do you know what the Government considered in that respect?

A. The action of the register shows.

Q. Yes, and that is shown on the map ain't it?

A. Yes.

Q. Well, we can judge about that as well as anybody else; you don't know anything other than what appears on the map?

A. Well, I have enquired from the register of the land office of the Government their actions in this respect; so we have had information from them.

Q. Had information from him that you are swearing to.

A. Yes sir.

Q. And you regard him as the Government, and can tell what the Government means?

A. He is representing it in Salt Lake.

Q. Now what I asked you is to explain how it was that that came to be filed as of June the 13th, the very day when the first was filed when it was not made until afterwards, and I simply want to know that, that is all, whether the filings on this was dated back

301 to the——

A. Well, the register explained to me that he considers that the date of filing of that line, and he put it on that second map.

Q. In other words it was dated back to the date that the first map was filed?

A. Yes sir.

Q. And that is the way that come in that way?

A. Yes.

Q. There isn't any mistake about the time that the map was made?

A. No.

Q. That is what I was getting at as to whether you could be mistaken. I supposed I knew that it was, but I wanted it to appear — is all. It was dated at the time it was first filed.

Mr. BROWN: Does the actual time of filing appear on there?

Mr. HENDERSON: Yes it appears on the second map. No I don't think the actual time appears here anywhere, does it Judge Harkness?

Mr. HARKNESS: I think not. I think they have treated the other simply as an amendment of the previous map.

Mr. HENDERSON:

Q. Can you tell us when that was actually taken to the office of the register?

A. No, sir.

Q. About how long was it, don't you know about how long it was after you had completed it; let's see, I think you said you completed it in the fore part of October, the first one, the end of October or maybe the first days of November.

—. ——.

Q. Well, the first days of November, I think you did say November, well, how long after that was it before it was actually filed?

A. That wasn't in my hands any more?

Q. Oh, it was taken from you?

A. Yes.

Q. So you don't know when it was filed. That's all.

Mr. HARKNESS: I believe that is all we have to offer at
302 present.

The COURT: You rest?

Mr. HARKNESS: Yes; if I have forgotten anything I will ask leave of court.

Plaintiff rests.

Mr. HENDERSON: Now if the court please, I want to make a motion for a nonsuit; we don't want to take any time at all, but I want to state the motion and the reasons for it. We move for a nonsuit upon the ground generally, in the first place, that the testimony given by the plaintiff here shows no right in them to recover in this action. And especially for the reason that they have shown no right whatever to this particular piece of land; that if any right is shown that is all, that there is no attempt to show any right to any of the land included within the description that is contained in this complaint; that there is no evidence whatever in the case tending to show that this company has ever ratified or approved the line where they are taking this line south of the river, south and east of the river; that it is shown on the contrary that they have not up to this time, or up to the time when this suit was commenced done that, or made any election or taken any action which establishes or selects that line; that they have made no selection of a line and filed a map prior to the commencement of this suit designating their line of definite location of the line as required by law as a condition precedent to their right. We say that we think that the testimony falls entirely short of proving any case at all according to the complaint.

The COURT: There is——

Mr. HENDERSON: Just a moment; and upon the further ground that it appears from the testimony that their right which they claim to have got from the Government to occupy the lands or any of the lands of the United States Government has expired by limitation and had before the commencement of this suit.

The COURT: There is certainly *prima facie* evidence of a case. The motion will be overruled.

Mr. HENDERSON: Give us an exception.

303 *The Defense.*

Statement of the case for defense by Mr. Henderson.

W. B. SEARLES sworn for defendants.

Examined by Mr. BAILEY:

Q. What is your name and business, Mr. Searles?
A. Civil engineer.
Q. Will you state briefly what your experience as civil engineer has been?
A. About fourteen years.
Q. And what work have you done as engineer?
A. Railroad and canal, water surveys generally.
Q. What railroad have you worked upon?
A. The Santa Fé principally, and the lines connected with that, Mexican Central, Gulf Colorado and Santa Fé Southern Kansas, and did some work over here on the Mercur railroad.
Q. What work have you done surveying canals?
A. Mostly in Utah.
Mr. WEDGWOOD: A little louder, if you please Mr. Searle, I don't quite catch you.
A. Mostly in Utah, and largely in Utah county.

Mr. BAILEY:

Q. Where besides in Utah?
—. The changes on some of the canal systems around here, the Brown and Hooper, and a plan of canal system that is now known as Mt. Nebo canal, and the work I have done for L. L. Nunn.
Q. You say mostly in Utah? Have you worked for Mr. Nunn in Colorado?
A. Yes sir.
Q. What work have you done for Mr. Nunn in Utah?
A. Surveying his reservoir in Provo canyon, and the flume line that he has put in.
Q. When did you first begin to do work for Mr. Nunn in Provo canyon?
A. '95.
Q. In 1895, what work did you do then?
A. I checked some levels for him there.
Q. At what place?
A. A point below Hanging rock to a point near the mouth of the canyon.
304 Q. What were those levels on, Mr. Searles, what was the work?
A. They were on the ground.
Q. For what purpose was the work being done?

Mr. WEDGWOOD: We object to that. Tell what he did and the work ought to show its purpose. This question is absolutely improper. Well that might be answered in a proper way.

The COURT: Answer the question.

A. A canal line.

Mr. WEDGWOOD:

Q. How is that?

A. A canal line was staked there.

Mr. BAILEY:

Q. Do you remember where the canal line began and where it ended?

A. Yes.

Q. I understood you to say it began about Hanging rock?

A. I said it began below Hanging rock.

Q. How far below Hanging rock?

A. Three-quarters of a mile at least, I couldn't tell exactly, not having measured it.

Q. State when you commenced doing any work in the canyon for Mr. Nunn and what that work consisted of.

A. I went to Provo canyon March '96, and commenced the survey of his reservoir, the contour lines of the reservoir, at the same time or contemporaneous with it, staking out the work for the present flume line for the men to work to.

Q. State what the contour line is, Mr. Searle, where it begins, how far above the level of the stream, and in general what it consisted of?

A. The contour line on which I first commenced work is sixty feet above the level of the stream at the present head works.

Mr. HENDERSON:

Q. At what?

A. At or near the present head works what was known then as the Middle rock in the canyon, a thousand feet below Hanging rock, and it consisted in a level line that ran up the canyon from that point at all points in which there would be a change in di-
305 rection of that contour line was a good permanent stake marked and set in there. That was afterwards raised for the purpose, for reservoir purposes of twenty-five feet.

Mr. BAILEY:

Q. For reservoir purposes of 25 feet; you mean that the water would be taken out 25 feet below the top of the dam?

A. Yes sir.

Mr. WEDGWOOD: We object to it as leading and suggesting.

The COURT: It is leading; let him state what was done.

Mr. BAILEY: I will withdraw the question. State what you mean by a reservoir purpose of 25 feet?

A. The dam, sixty feet of that reservoir was simply for raising the water to that height to gain increased height, and the upper 25 feet was to be used directly for reservoir purposes.

Q. How far below the top of the dam then would that canal be?

A. Twenty-five feet.

Q. Do you know whether a line was surveyed for a canal?

A. Yes sir.

Q. At that level?

A. The canal was surveyed there before I arrived on the ground at that level.

Q. What evidence was there that it had been surveyed when you arrived on the ground?

A. The line was staked, the brush cut sufficiently for the instrument-man and the chai-man to go through.

Q. Is there very much brush on the side hill at that point and along in that district?

A. Why in the three or four miles in which I saw that line there was a good deal of brush.

Q. Which side of the stream was that on?

A. The northwest side of the stream.

Q. And which side is the present canal that you speak of which you surveyed?

A. The northwest side of the stream.

Q. How many men did you find—or did you find any men in the employ of Mr. Nunn up the canyon when you went up in March?

306 A. I did.

Q. How many?

A. I cannot tell exactly, but 20 or 25.

Q. What where they engaged in doing?

A. They were engaged in working on this present flume line.

Q. When did you first see any of the employees of the Rio Grande Western Railway Company in the canyon, or do you remember about what time?

A. I can't tell you that exactly. I can tell you when I first met their engineer.

Q. Which engineer do you refer to?

A. Mr. Collier.

Q. What was that?

A. That was in the fore part of May.

Q. What was Mr. Collier doing at that time?

A. He was running a line up the canyon.

Q. Did you give him any notice as to what rights were claimed by you?

A. I did.

Q. And the people whom you represented?

A. I did.

Q. What did you tell him?

A. I told — that there was a sixty-foot dam at the point where we had put our location notice, and we stood within sight of it, so that it wasn't necessary for me to tell him where it was. I showed him.

Q. And where was that point?

A. That was about a thousand feet below Hanging rock, down the stream.

Q. Did you give him any notice in reference to a proposed dam at Hanging rock?

A. Later I did.

Q. What did you tell him with reference to that?

A. I don't remember my exact words at that time; I simply; I remember of notifying him that they considered Hanging rock a better position for the dam than the point further down and had adopted that.

Q. You have made surveys of that canyon, have you not, Mr. Searle, quite extensively?

A. Yes sir.

307 Q. And are familiar with it?

A. Ever since '92 I have been surveying the canyon on this river.

Q. Will you state then *when* whether you consider Hanging rock a better point for a dam than a point a thousand feet below?

A. The cross-section of the canyon is less at that point and I judge that a good foundation for a dam can be obtained there nearer the present water level than it can a thousand feet below.

Q. You cross-sectioned the canyon, you mean the width from the steep slope on the one side to the steep slope on the other

A. Yes.

Q. How wide is it at Hanging rock?

A. My memory is it is a little over 300 feet at the top.

Q. A little over 300 feet, what is the fall of the stream below Hanging rock as compared with the fall above the Hanging rock?

A. Well, for a short distance it is the same.

Q. Well, for a considerable distance below as compared with the distance immediately above?

A. Why it is eight to ten times as much, or six to eight times I would say more rapid.

Q. Are you familiar with this claim of Mr. Ferguson?

A. Yes sir.

Q. Do you know how far it extends above Hanging rock, state how far?

A. Nearly a mile.

Q. Do you know the fall of the stream in that country?

A. Yes.

Q. And if so state?

A. The fall of the stream is a little over twelve feet, if I remember rightly.

Q. A little over twelve feet; a dam twenty-five feet high at Hanging rock would cover all the Ferguson land?

A. Yes sir. That is all the bottom land; his claim runs up to hundreds of feet above the level of the stream.

308 Q. Would it cover all of the land that is described in the complaint?

Mr. HENDERSON: Which is described in the blue print here.

Mr. BAILEY: In that blue print there.

The COURT: You mean within the red lines or purple lines.

Mr. BAILEY: The land designated as railroad right of way, the lands described in the complaint.

A. I think it will cover all the land that is covered by the center red line, but I wouldn't wonder if a right-of-way line shown on here would run up on the hillsides above 25 feet; I think it would on the southwest side in places.

Q. Do you remember the exact date when you began to survey the contour line for the 85-foot level?

A. No, I do not; I can refer to the notes and get it.

Q. Where are your notes?

A. They are here; to my memory it was May 1st.

Q. Well, please refer to your notes, Mr. Searle?

A. May 1st.

Q. And when did you finish?

A. May 19th, I did some field-work after that as late as May 23rd.

Q. How did you mark the boundary line of that survey?

A. With a post two inches by six inches by four feet long.

Q. And how was that post——

Mr. WEDGWOOD: I didn't understand you.

A. A post two inches by six inches, by four feet long.

Mr. BAILEY:

Q. And how close together were those posts set?

A. As often as the contour, as there was an angle in the contour line, averaging from about 200 to 300 feet apart.

Q. And were those stakes marked in any way, if so, state how?

A. Marked "Water level Provo Canyon reservoir."

Q. And were those stakes of sufficient size to be seen by any one passing along?

A. Nearly all on the north and west side of the river can be seen easily from the road. Those on the south and east side of the river are too far away from the road to be seen; any one going over there can find them.

309 Q. They can be plainly seen by any one making a survey on either side of the river, could they not?

A. Yes sir.

Q. I understood you to state that you had had a great deal of experience in connection with railroad surveys; are you familiar with the actual field-work and construction-work on railroads?

A. That was my business for about nine years.

Q. I would ask you to state then if in your opinion it is feasible to construct this line of railroad which has been surveyed by the Rio Grande Western railroad at a higher level than the present survey?

A. I do.

Q. At the Hanging rock?

A. I do.

Q. How much higher would you consider it feasible to construct it with reasonable cost?

A. 85 feet or a hundred feet; I don't know what you would call reasonable cost though.

Q. How much more in your opinion would it cost to construct it 25 feet higher than it is at present?

A. It would not cost any more.

Q. In your opinion it would not cost any more?

A. No sir.

Q. Will you please explain that to the jury?

A. Why, the principal difference in cost at this point will come in the crossing of the South fork. They at present cross Provo river there twice; the two crossings of the river, or the change in the channel will cost as much as the grade across South Fork flat, if it will not cost more, and then a mile and a half will be practically on the same grade line that they now occupy with their survey.

310 Cross-examination by Mr. WEDGWOOD:

Q. Now, Mr. Searle, when did you first go up the canyon in 1895?

A. Personally or for this company?

Q. Well, when you said you went to work first there for Nunn, in 1895, I refer to that time, what time was it?

A. It was in I think the latter part of November.

Q. The latter part of November?

A. Yes sir.

Q. You say you ran two levels from a point below Hanging rock to the mouth of the canyon; I believe you stated in answer to a later question that it was three-quarters of a mile below, is that right?

A. Yes, sir; but I didn't state what you said I stated.

Q. Well now, that is the way I understood you, Mr. Searle, did you run two lines from a point below Hanging rock to the mouth of the canyon, in 1895?

A. No, but I ran to a point near the mouth of the canyon.

Q. Well, where did that line commence, the first level that you ran with relation to the river bed or the surface of the water, or the river bank?

A. My memory is from a bench-mark about ten feet above the surface of the water and I checked the line of levels through to the bench-mark at the other end of the work.

Q. Now, how far did you go down on that line, Mr. Searle?

A. I think it is pretty close to two miles; I am not certain it was a short distance.

Q. You went out two miles on that line?

A. It was to check another man's work.

Q. And that line commenced about three-quarters of a mile below Hanging rock?

A. That is my memory.

Q. Is that at a point that is sometimes termed "Middle rock" or near there?

A. No sir.

Q. Between Middle rock and Hanging rock?

A. No sir.

311 Q. Farther down still?

A. Farther down the stream.

Q. Now, what was the other line that you checked over at that time?

A. The same line.

Q. The same line; did you go the same distance on it at that time?

A. I did.

Q. Went over your previous work?

A. Yes sir.

Q. Now, that was all that you did that fall?

A. For Mr. Nunn, yes sir.

Q. Who was working with you at the time that you did that work, what persons?

A. Don Coray worked as rodman for me at that time.

Q. Now you state that you saw some line, or stated that there had been a line surveyed on a sixty-foot level, if I understand you correctly?

A. Yes.

Q. You say that you followed it substantially stated that you followed that for two or three miles; did you retrace that line at any time?

A. I did the next year.

Q. You did the next year?

A. Yes.

Q. What time the next year?

A. During June.

Q. June 1896?

A. Yes.

Q. Now, when you retraced that line in June 1896, did you have any field-notes of that line?

A. I did not.

Q. Did you ever see any field-notes of that line?

A. Yes.

Q. Where are they?

A. Really, I could not tell you.

Q. How long since you saw any?

A. I think I have seen them within the last year; I know that I saw them at the time that I was instructed to run that line out there and to the mouth of the canyon.

Q. Do you think you could find those notes?

A. I think I could find those notes in an hour.

Q. Who made them?

A. They were signed Otto Suhr.

Q. Signed Otto Suhr?

A. Yes sir; O. B. Suhr.

Q. Now, did you see any other line there excepting that one?

312 A. The line on which I did the work was another line, was all.

Q. You didn't see any other line except the one you did the work on?

A. Those two lines.

Q. Well, the one you worked on and the sixty-foot line?

A. Well, they were bench lines which had been established by another engineer.

Q. Well, I say those two lines are the only lines?

A. Yes.

Q. Now, did you go over the line prior to the time you went over it in 1895?

A. This same line, go over that ground?

Q. Yes.

A. Yes sir.

Q. Over the same ground?

A. Well, practically the same ground.

Q. Practically the same level line from the water, starting about the same places?

A. I judge so, though my stakes were gone, I could not — that it was exactly, but within ten feet, I would judge; it was about the same line.

Q. Now you commenced went there in the spring of 1896, in March?

A. Yes sir.

Q. Now Mr. Searle, I will ask you where that line that you checked over at least, in 1895, was in relation to the flume that was being built there in '96, in relation to the flume that was being, or flume bed that was being worked on at that time?

A. Well, there was no flume being worked on in '95.

Q. Wasn't there a flume bed being worked on, or '96, I should say, if I said '95 it was a mistake?

A. This line I worked on in '95 is about a half a mile down the river from the present flume grade where that enters the river.

Q. From the present flume grade where that enters the river; now when you went up there in 1896, in March or after that time any time did you see a stake above the bridge and below the Hanging rock marked "top of dam"?

A. I don't remember to have seen such a stake.

313 Q. Don't remember ever seeing such a stake as that?

A. No.

Q. Now, what did you first do when you went up there in '96 Mr. Searle, and by the way, when did you go up there, what date, what time in March?

A. March the 20th or 21st.

Q. March 20th or 21st, was the first you went there?

A. That is my memory, and I worked on the first day on the survey of the present flume line?

Q. The first day, now when was that? A. March 20th or 21?

A. Well I worked on the 21st on that line. I wouldn't be certain whether I was there on the 20th or not.

Q. Well, what did you do on the 22nd?

A. I worked part of that day at that work.

Q. How much; what did you do after that?

A. After that?

Q. What did you do the other part?

A. Well, I wouldn't be certain about that.

Q. What did you do on the 23rd, Mr. Searle?

A. I think I went with Mr. Cramer to the place where the present dam, where the present dam site was located, and run a line of levels for him up sixty feet.

Q. Well, did you keep field-notes of your work?

A. I did, but did not keep all the dates complete.

Q. Do your field-notes show what date that you did that?

A. No, they do not.

Q. What is the first date that they do show that work, have you got the field-notes——

A. (Int.) That was the 24th my working there.

Q. Just turn to the place?

A. I don't know but that will take a little time.

Q. In the language of Judge Henderson, Mr. Searle, "Why don't your notes show the date there"?

A. Because I didn't do what I ought to have done at that time.

314 Q. Because you neglected it?

A. Because I didn't do it at that time.

Q. Because you neglected it?

A. Had I have done it at that time they would be still here. The first work that I——

Q. (Int.) Well, just find it in your book, Mr. Searle, and let me know the page?

A. All right; that will take me a little time to see where the levels are.

Q. Take plenty of time?

A. This book doesn't show the date on which that sixty-foot level was established.

Q. What is the first date shown in that book, Mr. Searle, that you worked on the sixty-foot level?

A. April 4th.

Q. April 4th is the first time?

A. There is a record in this county court-house that shows the first date.

Q. Well, that is the first date that your book shows?

A. Yes.

Q. Will you let me see that book, Mr. Searle?

A. That is the date I started the contour line.

Q. That is the date you started the contour line?

A. Yes.

Q. Then April 4th was the first date; April 4th then do I understand you that was the first time that you worked on the sixty-foot contour line?

A. Yes, that is the first date I worked on the contour line.

Q. On the sixty-foot?

A. Yes.

Q. So then prior to April 4th there had been nothing done on the sixty-foot contour line?

A. I can say that prior to April 4th I established the sixty-foot contour line.

Q. Yes, but had you established it by notes?

A. Yes, I established it by a line of notes that ran up there.

Q. Well, where are those notes, Mr. Searle?

A. I think I can produce them; I haven't got them here though.

Q. What did you do to establish that?

A. I started from the water level at what is known as Middle rock; you recognize it?

315 Q. Yes.

A. And pegged up to the sixty-foot level from there.

Q. Now, you say you kept notes of that?

A. I think I did, through it was done right out there, I might not possibly have kept a note of that, but I think I did.

Q. Well, that was a note book that you were using about that time, wasn't it?

A. Yes, after.

Q. That is your notes in regard to the sixty-foot level, isn't that Mr. Searle?

A. That is my notes of the sixty-foot contour line; however I might take it on any piece of paper, it was simply a short piece of work to do, and would——

Q. (Int.) But the first that was done; you are prepared to say that first that was done on establishing the sixty-foot contour and marking it in a note book was done on April 4th?

A. No sir; I am not, I am prepared to state it was before that.

Q. Well, show me where it was marked in your note book anything before April 4th?

A. It isn't necessary; it is a matter of record in the county recorder's office down here.

Q. Well, I don't want to argue with you Mr. Searle, and excuse me for suggesting that it isn't your place to argue with me on that point. But show me if there is any date where there is any work done prior to April 4th?

A. It isn't in that book.

Q. Well then, it isn't there, is it?

A. I judge not.

Q. Now prior to April 4th Mr. Searle, you had seen Mr. Baxter—you know Mr. Baxter, do you not, the witness that was on the stand?

A. I know him when I see him, yes sir.

Q. You knew him in 1896, the spring of '96?

A. I did not.

Q. Knew who he was, didn't you?

A. Not until very late in the spring of '96.

Q. What time did you first know who he was?

A. I could not be sure but some time along in that spring, late in the spring, after meeting Mr. Collier, in May, I was informed that a certain gentleman I saw there was Mr. Baxter, who had charge.

316 Q. Well, you had seen the man whom you afterwards found out was Mr. Baxter before that time?

A. I had not.

Q. Before you had seen Mr. Collier?

A. I had seen Mr. Collier in the fore part of May.

Q. What time in May?

A. I have a record of seeing him May 13th.

Q. Didn't you see Mr. Collier before that time?

A. I will not be sure, because I met Mr. Collier frequently during that year in this town, and I was acquainted with him and had been for years, and I wouldn't make any special note of meeting Mr. Collier.

Q. Now, prior to April 4th, Mr. Searle, did you know that any surveyors were working between Provo and the canyon or in the canyon?

A. I had not heard of any surveyors up to April 4th.

Q. Well, that isn't my question; I ask you prior to April 4th did you know that any surveyors were working between Provo and the canyon or in the canyon, did you have any knowledge of it?

A. None except myself.

Q. You are the only person that you knew of that was surveying in that canyon or between it and Provo?

A. Yes sir.

Q. When did you first have any knowledge that there was any surveyors working between Provo and the canyon or in the canyon?

A. About the time I changed from the work on the sixty-foot to the eighty-five-foot level.

Q. About that time?

A. Yes, sir.

Q. Well, was it before, or afterwards?

A. I think it was afterwards, I am not certain.

Q. You are not certain; now Mr. Searle you testified that in your other examination, did you not, or I will ask you if you testified in your examination in the prior case that you begun work on the present flume line on the 24th day of March, and that you commenced on the sixty-foot contour line on the 27th day of March; did you testify to that?

A. I think I did.

317 Q. Well was that the fact?

A. Yes.

Q. You didn't commence before that did you?

A. No.

Mr. HENDERSON: Commenced work on what?

Mr. WEDGWOOD: The sixty-foot contour.

A. Probably my memory was fresher then; probably it was March 27th when I set that sixty-foot peg up there.

Q. That was just put in there to get the point to commence at?

A. Yes sir.

Q. And you say your first record is April 4th?

A. The first record on the contour line was April 4th.

Q. Now, how far did you survey on that sixty-foot level. If you want this book to refresh your memory?

A. Well, it will take me some little time to figure out just how far I surveyed.

Q. Well, I would like the date you stopped Mr. Searle?

A. Oh, the date I stopped?

Q. How far you went on that sixty-foot level?

A. I went to the North fork.

Q. You went to the North fork?

A. And the last date that I worked there; I can tell the first day that I worked on the 85 foot, is the only date, is the nearest date that I can give you.

Q. Don't your notes show, Mr. Searle, the last date that you worked?

A. It simply shows where I went to, don't give the dates.

Q. What dates do they show between April 4th and the time that you arrived at the North fork?

A. April 4th, no notes in this book from April 4th to April 21st.

Q. So as a fact Mr. Searle surveyors don't always keep every date do they?

A. No, sir.

Q. What?

A. That is right.

318 Q. And it is not an unusual thing for an omission of a date in a note book?

A. No sir.

Q. Now, Mr. Searle, what did you do on the 21st?

A. On the 21st day of what?

Q. Of April.

A. I ran some levels at the county road.

Q. So you are prepared to say from your note book that you didn't work on the sixty-foot level after April 20th, are you, that is the next date you have got is on a different job, the 21st.

A. After April 21st?

Q. 24th; I understand you the 21st; now Mr. Searle, between April 4th and April 21st, or 24th whichever it is, did you work all the time on the sixty-foot level?

A. No sir; I did not.

Q. What portion of the time did you work up there?

A. I don't think over twenty-five per cent.

Q. Where did you work the balance of the time?

A. On the flume location and cross-sectioning.

Q. On the flume location?

A. Where the flume was made; I devoted to the sixty-foot level as much of my time as was not absolutely needed in the other work.

Q. And what you did on the sixty-foot level was when you was not necessarily otherwise employed?

A. When I could get away.

Q. Yes, when you could get away?

A. I didn't stop the other work.

Q. But your first duty was to the flume level?

A. Yes.

Q. Now, you say you ran to the North fork, Mr. Searle?

A. Yes, sir, that is my notes show the last stake I stuck there was 200 feet from Boren's cabin, which is 200 feet from the North fork.

Q. Yes, now what staking was done on that line?

A. The level stakes were set and the transit line carried
319 part way around and variation points with a two by six four-feet stakes.

Q. Two by six four-feet stakes?

A. Yes.

Q. A portion of the sixty-foot level?

A. Post put up.

Q. How many of them was put up?

A. I should think about forty or fifty.

Q. You just depend upon your recollection for that?

A. Entirely.

Q. How far apart, the same as you testified in the other, some places wasn't over fifty feet, some places it is six or seven hundred feet, wherever you established a point on the contour line anywhere?

A. Yes sir; whenever there was an angle in the contour line I put one of those stakes.

Q. Well, was that kind of stakes put up all the time?

A. No, I had stakes put up before that, a small temporary stake was always set for my use for setting the instrument over the point in it.

Q. And then the larger stakes put in in their place?

A. And large stakes were put in as close to that as I could without destroying them to keep the small stake.

Q. Now Mr. Searle, that level never was run but on one side?

A. That level was run on both sides.

Q. Was run on both sides?

A. Yes sir.

Q. Well, did that ever connect clear around?

A. No, sir; because I was ordered to——

Q. That may be true, but just answer my question. As far as that goes, Mr. Searle, do you mean to say you went over on the south side of the river and run the sixty-foot level?

A. Oh, no, I did not go over on the south side of the river, but I had the rodmen on the south side of the river.

Q. Yes.

A. Who was placing those angle points for me at the same time that another rodman was placing them on the north side of
320 the river. Most places the can*y*on is so narrow that it is very easy for me to see clear across.

Q. And did you stake both sides of the river?

A. I established the levels on both sides of the river.

Q. Did you stake both sides of the river?

A. What, you mean the large stakes?

Q. Yes?

A. I staked them both with the small stakes, but don't remember whether the large stakes were put on the south and east side of the river or not on the sixty-foot level.

Q. You didn't need the small stakes for your instrument on the south side?

A. I did.

Q. Did you set your instrument on the south side?

A. Yes, I must make a record of that point, and must preserve it, or I can't use it.

Q. Let's understand each other, Mr. Searle, you started on the 4th of April and went up the river on the north side?

A. Yes sir.

Q. To North fork?

A. Yes sir.

Q. Worked about twenty-five per cent. of the time, and quit there on the 21st or 24th, which?

A. Well, I say, I can't be certain.

Q. Well, but the next record you have got of any work is the 24th?

A. Yes.

Q. Well, now when did you take your instrument over on to the south side and work there on the south side of the river?

A. At the same time I started up the north side of the river; I had my rodman take the points on the south side of the river, driving stakes which he could find again, for my use.

Q. And you just turned your instrument and ran that level over to him on that side, is that it, and he put on those stakes?

A. He put in those stakes.

Q. And you think there was small stakes put in on the other side?

A. I know there was; don't think it, I know it.

321 Q. Up as far as you went?

A. Up as far as I went where I could see from the north side.

Q. Where you could see?

A. Yes sir.

Q. Well, what is the character of the ground on the other side, could you see all the way?

A. All the way with the exception of the part in the South fork.

Q. There were no stakes at the South fork?

A. Not on the sixty-foot level.

Q. No, there was a break of about how long in there, at least?

A. Directly across, about a thousand feet around the contour in the South fork about 2,500.

Q. About 2,500 on the contour a thousand straight across?

A. If I remember right, I think the 85 was about 3,500.

Q. Anyway those stakes stopped after you got up about at the North fork, and nothing more was ever done?

A. Well I did nothing on that line.

Q. Nothing but the markers were set out on the south side to the best of your knowledge?

A. I don't remember, except at the dam site and very close to it there were two or three stakes I know put up on the south side, but beyond that I don't remember.

Q. Well, what were those markers, what kind of a stake, just describe it?

A. Why a hub two inches, by six or eight inches driven in the ground with a stake one inch by two inches by two feet long driven along beside it so as a man could find it, and above that a piece of rag tied on the bush to indicate that.

Q. Well, did you do that all on the south side of the river?

A. I did.

Q. On the south side?

A. I did.

Q. That the rags was——

A. Yes, and you will find 'em there yet, some of them.

322 Q. None of the big stakes were set up there?

A. I say my memory is that two or three were set up.

Q. Well, besides those two or three where you first commenced none were set there?

A. That is my memory.

Q. Well, you would know, wouldn't you, because you did the work? A. That is, you had charge of the work?

A. That is right, but in this case I was ordered to discontinue it before finishing it, and I know that I did not set them all on the north side, and whether there were any beyond this right near the point, I remember setting two or three, whether there were any beyond that I could not tell surely.

Q. Well, while you worked there there were no large stakes set in the south side besides those right at the starting point?

A. That is my memory.

Q. How much farther would you have to carry the level before your contour lines met on the north and south side of the river on that sixty-foot level?

A. What is known as Still's cabin.

Q. What?

A. Still's cabin.

Q. About where would that be with reference to some natural object on the river, or how far above where you did stop there, you mark it in feet?

A. Something like two miles.

Q. And how far did you survey in miles?

A. How was that?

Q. How far did you survey in miles up the river from Middle rock?

A. Nearly six.

Q. Nearly six; is it six miles from Middle rock up to North fork?

A. You mean on the sixty-foot line?

Q. Yes, that is what I mean?

A. Why it is a little over two miles there.

Q. Yes, that is what I thought; then you got about half way the length of that would make the contour line running on the banks.

A. I think a little more than half.

323 Q. Approximately about half; now you started that level from Middle rock?

A. From the water level at Middle rock.

Q. What?

A. From the water level at Middle rock.

Q. Yes, but the point where you started was about opposite Middle rock, up on the hill?

A. Yes sir.

Q. Now you spoke about a notice, when was that notice put up, Mr. Searle?

A. What notice?

Q. You said there was a notice there that anybody could read, and you told Mr. Collier that there was a notice that anybody could read there, when was that notice put up?

A. In the latter part of March.

Q. In the latter part of March; now when did you go to work, when did you commence to work on the level twenty-five feet above there, Mr. Searles?

A. April 25th.

Q. April 25th; now when did you commence to run that 85-foot level?

A. At the point known as Hanging rock.

Q. At the point known as Hanging rock; now how far is Middle rock from Hanging rock?

A. About a thousand feet.

Q. Up the stream?

A. Down the stream.

Q. Down the stream?

A. From Hanging rock.

Q. Yes, Middle rock is below Hanging rock?

A. Yes, sir.

Q. Isn't it nearer 1,350 feet, isn't that the distance, Mr. Searle?

A. No, it is nearer 950 feet.

Q. Nearer 950?

A. That is the exact distance.

Q. Your notes show that do they?

A. Yes sir.

Q. Now, Mr. Searle when the 60-foot level being started at Middle rock, and the 85-foot level started at Hanging rock, 900 feet below there, one starting on the 4th of April, on the first one, and the other on the 25th of April, the scheme was changed wasn't it?

A. Not in the least.

Q. Not in the least, the place of the dam must have been changed between that time?

A. Exactly.

324 Q. Well, then, the scheme was changed, wasn't it?

A. No sir.

Q. Wasn't the location of the dam changed?

A. The location of the dam was changed, but the plan of operation was not changed.

Q. Well, that may be true?

A. The scheme embraces the use.

Q. Yes, well, I will put it perhaps a little more proper that you and I may look at it. The manner of carrying out the scheme was changed by changing the location of the dam from Middle rock to Hanging rock?

A. Yes, the position of the dam was changed.

Q. The manner of carrying out the scheme was changed between April 4th and April 25th?

A. I don't know what you intend to imply by the manner of carrying out the scheme, but the position of the dam was changed between April 4th and April 25th.

Q. Well, that will do then; didn't you answer to Mr. Bailey here that the 85-foot, that the 60-foot level was raised 25 feet so as to make it 85?

A. Yes sir.

Q. Well, then the scheme was changed wasn't that right?

A. Not to my knowledge at all.

Q. Well, didn't you testify to Mr. Bailey that the sixty-foot was to hold water back so as to draw out water at the sixty-foot, and that the 25 feet was put in there for storage purposes to do away with ice, etc. didn't you testify to Mr. Bailey to that effect?

A. Yes sir.

Q. Well, then, between those two dates, April 4th and April 25th, the scheme was changed, wasn't it?

A. Not to my knowlege. I have testified to what I know; do you want me to testify to something that I may guess at.

Q. The sixty-foot dam contemplated taking the water out at the top didn't it?

A. That was my understanding.

325 Q. Yes, that was your understanding, that was on April 4th that that was inaugurated?

A. That was in March.

Q. Well, that was the time you went to work there?

A. I went to work on March 27th, as you tell me now.

Q. Well, how is it your books show the first work on April 4th?

A. The first work on the dam was in March; the first work on the contour was on April 4th.

Q. Will you please answer my question; I will have a hall for you this evening——

The COURT (int.): You will just answer the questions, Mr. Searle.

A. Excuse me, I didn't know I was delaying things.

Mr. WEDGWOOD:

Q. At April 4th your books show the first work on the sixty-foot contour?

A. Exactly.

Q. You testified to Mr. Bailey that the 85-foot, the 25-foot was added so as to take water at the sixty-foot level, with a twenty-five-foot storage?

A. Yes, sir.

Q. Now work was commenced on that April 25th?

A. April 25th, I commenced work on the 85-foot contour.

Q. The water on the sixty-foot contour was to be taken out at the top of the sixty-foot contour?

A. That was my understanding.

Q. Then the scheme was changed between those two dates, wasn't it?

A. I have stated to you exactly what I know. Now if there is anything else that you want why——

Q. Well, never mind?

A. You please make the statement.

Q. What is the difference, Mr. Searle, between the 85-foot dam at Hanging rock and the 60-foot dam at Middle rock, of course it will depend upon the initial point; the initial point is the same so that there would be the difference of twenty feet, or 25 feet?

A. Well, that isn't the answer you wanted, so I thought I
326 would let you state.

Q. Yes, I want to know whether the initial point is the same? whether you start from the same base point in one case as the other; in other words, whether the 85 — contour line is 25 feet above the 60-foot contour line?

A. Yes sir.

Q. Where do you measure the 85-foot contour line from?

A. From the same point of elevation. It is simply a raise of 25 feet from the 60 feet.

Q. A raise of 25 feet from Middle rock, and extended up the canyon to Hanging rock?

A. Yes sir.

Q. You spoke about twenty or twenty-five men working up there for Mr. Nunn when you went up there in March; where wer- these men working?

A. They were working principally at a point from the present head works out six or seven hundred feet.

Q. Down the——

A. Up the stream.

Q. Up the stream?

A. Yes sir.

Q. And what were they doing?

A. Clearing brush and digging the place for——

Q. (Int.) Where was that with reference to Middle rock?

A. It is just below it.

Q. Just below Middle rock, you say the principal part of them were working in there?

A. Yes sir.

Q. What were the balance of them doing?

A. I think Mr. Cramer had a couple helping him with the survey, just where they were working I don't know.

Q. So all the men that were engaged in manual labor were working at that place?

A. To the best of my recollection at that time.

Q. Yes, at that time; when do you say it was you saw Mr. Collier, Mr. Searle?

A. I think it was in May.

Q. Could you tell what time?

A. I believe about the 10th.

327 Q. About the 10th of May, and when was the first that you knew he was in the canyon?

A. I don't know the date, a week or two previous to that.

Q. A week or two previous to that?

A. Yes.

Q. Didn't you make a note of the fact that surveyors were in the canyon on any of your notes or anything of that kind other surveyors?

A. No.

Q. Made no note of that kind, did you?

A. No.

Q. Now, you said you was examined or stated in substance that you judge a good foundation could be obtained for a dam, a better foundation for a dam at Hanging rock than below Hanging rock, I understood, to Mr. Bailey; at the time these notices were posted, Mr. Searle, these notices at this sixty-foot level, was there any notices posted anywhere else?

A. When was it?

Mr. BAILEY: If your honor please, this is improper examination. I don't think the witness was asked about any notice. It was shown that they had actual notice of the work that was being done. I don't know that there is any objection to its going in, but it is improper.

Mr. WEDGWOOD: I don't think the gentleman can bite off his testimony anywhere he desires, if the court please.

The COURT: There was something on that question, I don't remember just what it was.

Mr. WEDGWOOD: Well, I will turn to it; you testified in substance "I saw Mr. Collier the fore part of May; he was running a line; I told him there was a sixty-foot dam at notice a thousand feet below Hanging rock;" went on to say, a notice was there, anybody could see it. And then again, they claimed the occupation of this canyon, and whatever might show as to what they have done in that line surely is cross-examination if they didn't ask a

328 direct question which this might be in answer to.

The COURT: Objection overruled. Answer the question.

Mr. HENDERSON: Take an exception.

Mr. WEDGWOOD:

Q. Any other notice put up excepting that?

A. In what way.

Q. Anywhere, claiming water up the canyon, or claiming anything.

A. I personally put up a notice.

Q. You personally put up a notice?

A. Yes.
Q. Where?
A. In Wasatch county.
Q. Well, name the place, if you can if it has any, give the name?

Mr. BAILEY: If your honor please, we object to this as improper cross-examination. The witness was not questioned with respect to any notice that he put up personally.
The COURT: There was some evidence in regard to notice. Now just what the wording of it the court don't remember, in the direct examination of this witness.
Mr. BAILEY: If the court is going into everything that this witness did personally you might consume ten years in the trial of this case.
The COURT: Answer the question.
Mr. BAILEY: Give us an exception.

A. Would you kindly read the question.
Question read.
A. It has no given name that I know of it was about a mile, about a quarter of a mile from Deer creek.
Q. Near Deer creek, how many miles above this notice down near Middle rock?
A. I should judge about seven.

Mr. HENDERSON: Now, if the court please, it has now developed where it was; now I ask that this all be stricken out; seven miles above there; talking about another thing that he did simply personally.

Argued to the court by respective counsel.

329 The COURT: For the present time the court is unable to see the bearing that this may have, but to show the intent of the parties up there in regard to location——
Mr. WEDGWOOD: I will ask one or two questions without further ado, before the court rules on it.

Q. Mr. Searle, what time in the day did you put up this other notice you speak of?
A. The one at Deer creek?
Q. Yes?
A. My memory is that it was between five and six o'clock in the evening.
Q. What were you- hours of employment with Mr. Nunn?
A. Why, it is supposed to be eight hours a day.
Q. Eight hours a day; didn't you work ten hours a day?
A. Sometimes I worked sixteen.
Q. Well, wasn't you supposed to work ten hours a day?
A. What?
Question repeated.
A. No.
Q. That wasn't your contract of employment?
A. No specified contract of employment.

Q. Was none?

A. It was generally understood that engineers generally work eight hours a day.

Q. Well did you work eight hours a day?

A. I think I averaged about eight hours a day.

Q. You think you averaged about eight hours a day?

A. Sometimes I worked sixteen and sometimes I didn't work at all.

Q. That is, you worked when you wanted to and when you didn't you didn't?

A. No sir.

Q. What time did you usually cease work in the evening, what was your custom?

A. In the evening?

Q. Yes.

A. Well, my usual custom is to cease working some time between five and six o'clock, to be at camp at six o'clock.

Q. Well, did you cease working that evening earlier than usual?

330 A. I was not working that evening.

Q. Not working that evening at all?

A. I was working in the morning.

Q. You were working in the morning?

A. Yes.

Q. You drew pay for that morning?

A. I drew pay for that month.

Q. Yes, and that month included that day, did it, Mr. Searle?

A. Yes sir.

Q. Now, was that notice at Deer creek put up the same day as that notice at Middle rock?

A. My memory is that it was.

Q. It was?

A. Yes, sir.

Q. Was there any agreement between you and Mr. Cramer—or Mr. Nunn, or any of the employees, persons who were over you, for any contract respecting that notice?

Mr. HENDERSON: Object to that as including Mr. Cramer——

Mr. WEDGWOOD:

Q. (Int.) I will ask you another question: Mr. Cramer was in the employ of L. L. Nunn at that time, was he not?

A. I believe he was.

Q. Well, don't you know he was?

A. He was giving me directions.

Q. You were working under him?

A. Yes sir.

Q. And taking your directions from him?

A. Yes sir.

Q. He was the chief engineer or surveyor at that time, wasn't he?

A. As far as I know.

Q. Yes, to the best of your knowledge, you regarded him as such at that time?

A. He was my chief at that time.

Q. Now, I will ask you, Mr. Searle, if this notice—if there was any understanding between you and Mr. Cramer, or Mr. Nunn, or any of your superior officers above you, that that notice should be put up at Deer creek, at the same time that this one was, or about the same time?

A. I had advocated the putting up of that notice to Mr.
331 Cramer. I showed him the possibilities of a reservoir up there, and he said he didn't know whether they would want to consider using it; and on my own responsibility I put up a notice claiming it. I expected thereby to be able to make something if they did not want to use it.

Q. Did you claim it for yourself?

A. Yes, I claimed it — my own name and for myself.

Q. For yourself?

A. Yes.

Q. But you did talk with Cramer about it?

A. I had asked him to consider the use of that land as a reservoir.

Q. Well, he didn't say that he wouldn't consider it at that time?

A. No.

Q. Did he say that he would consider it at some future time or words to that effect?

A. I don't remember that he did.

Q. Well, wasn't it understood, Mr. Searle, between you and him there at that time that the notice should be put up there at the same time the other one was, or about the same time, and the advisability of using that site should be passed upon and considered at a later date, wasn't there an understanding at least between you and him to that effect?

A. The advisability of using that particular site in any manner whatever was put off until a later date.

Q. That was in an understanding between you and him to that effect, now, Mr. Searle, what is the fact as to whether or not those notices were identical with the exception of the name. Well, with the name and such other changes as the change of location would require.

A. I think they must have been because I was not familiar with the main—with the method of putting up that notice, and asked either Mr. Cramer or some one there what the form was, and he showed me the form he had prepared for the other reservoir. I have always claimed the use of the land above——

332 Q. Well, I just asked what took place at that time.

A. Deer creek is my own special property if I want it.

Redirect examination by Mr. HENDERSON:

Q. Now, I want to ask a question bearing upon that point: Mr. Searles was whatever notice you put up there, was it put up by you for the company, or under the direction of the company in any way?

A. I put it up for myself, and expected solely to be benefitted by it, the first one.

Q. Yes, not as a member of this——

A. Not as an employee of that company.

Q. Yes, not as an employee of that company?

A. Yes sir.

Q. But in your own interest and your own interest alone?

A. That was my understanding of it at the time I put it up.

Mr. HENDERSON: Now if the court please, I object to it, it is a separate and distinct thing entirely. By the way I want to ask one question.

Q. Deer creek you say is seven miles from Hanging rock?

A. Yes sir.

Q. And it is over in another valley

A. It comes into what is commonly termed Provo canyon, but that is way up to the upper end of it, where it is very flat.

Q. It is really out of Provo canyon?

A. Yes, as far as reservoir purposes are considered.

Mr. HENDERSON: I object to it, if the court please, it has nothing to do with the controversy we are trying here at all, in any way.

The COURT: You move to have it stricken out?

Mr. HENDERSON: I move to have it stricken out.

333 The COURT: I think that part of the testimony should be stricken out.

Mr. WEDGWOOD: We take an exception.

Recross-examination by Mr. WEDGWOOD:

Q. Now, Mr. Searle, you had been over Provo canyon surveying it with reference to its capabilities, possibilities for the development of power prior to the time you went into Mr. Nunn's employ, had you not?

A. Yes sir.

Q. Now, you stated to Mr. Bailey that you should judge there would be a good foundation, a better foundation obtained for a dam at Hanging rock than at Middle rock, on what do you base that?

A. Why my judgment that a solid rock foundation crosses that canyon there nearer the present surface of the river.

Q. During the surveys and lines that you ran up the canyon prior to the time that you went into the employ of Mr. Nunn you became familiar with the canyon, did you not?

A. Yes sir.

Q. And was familiar as to be enabled to form a judgment in regard to its reservoir capabilities, as an engineer?

A. I believe so.

Q. Now, I will ask you, Mr. Searle, as a fact is there *is* any location or was in your judgment any proper location or any place where a proper foundation could be obtained this side of Deer creek for a dam?

A. Yes sir.

Q. When did you first make up your mind for that, feasibility and practicability and proper foundation?

A. I think I planned a dam at Hanging rock in '93 or '4.

Q. In '93 or '4? Now do you know who put up that notice on the sixty-foot level?

A. Yes.

Q. Who did?

A. F. J. Cramer.

Q. He put it up; was you with him when he put it up?

A. Why, I think I was there, close enough to know that
334 he was putting it up at the time.

Q. Did you see it written?

A. Yes.

Q. Who wrote it?

A. Well, that is doubtful; I think Cramer or one of the young men that he had wrote it.

Q. Where was L. L. Nunn when that notice was written?

A. I could not tell you.

Q. He wasn't there? He wasn't there at all.

A. He wasn't on the ground.

Q. Do you know whether he was in the canyon at all?

A. When the notice was written?

Q. Yes.

A. I won't be certain. The notice was written the night before it was put up. I know Mr. Nunn was there very close to that time, but just whether — was there that evening or not I don't know.

Q. What is your best recollection, Mr. Searle?

Q. My best recollection is that he wasn't up there that evening, but I may be mistaken.

Q. And had not been up there for several days?

A. No, I know he had been within a few days.

Q. Well, how much would be a few days?

A. How was that?

Q. How much would be a few days?

A. Oh, two or three.

Q. Two or three; did you see any railroad men up there about that time?

A. I did not.

Q. None at all?

A. Not a man that I know that belonged to the railroad; might have seen men that belonged to the railroad, but I didn't know it.

Q. Did you see anybody that you know had any connection with the railroad about the time or prior to the time you commenced the work on the 85-foot level?

A. Shortly afterwards I saw some of the men.

Q. Shortly afterwards?

A. Yes.

Q. How long afterwards?

A. I could not tell you.

335 Q. What men were they, Mr. Searle?

A. I can only tell you from what I was informed. A car-

riage drove up there and I was informed that Mr. Yard and Col. Dodge and several other people were in that carriage; I didn't see them and they didn't stop.

Q. Hadn't you heard before that they were there?

A. That they were there?

Q. The engineers and surveyors?

A. Yes, I had heard previously that they were down, I think I heard within a few days of when Mr. Collier started, that he had started a survey.

Q. About when in your best judgment did you first know that Mr. Collier started a survey?

A. Some time about the middle of April.

Q. Oh, well, about the middle of April?

A. That was my judgment about it, when I was first informed.

Q. And that was about ten days before you commenced on the 85-foot level?

A. Oh, yes, I was still prosecuting the work on the sixty-foot level.

Q. Well, you say a few days after you first went there that you first learned that Mr. Collier was working up there?

A. No, I did not say that.

Q. What did you say?

A. I said about the middle of April.

Q. Well, didn't you say before that, a few days after you first went up there?

A. No, I said a few days after I commenced work on the 85-foot level, that I saw the carriage drive.

Q. You are sure it was afterwards?

A. I think so, I would not be certain. I know I was working up there, and know where I was working.

Q. Now are you certain you wasn't working on the sixty-foot level when that carriage came up there?

A. How was that?

336 Q. Are you certain you wasn't working on the sixty-foot level when that carriage came up there?

A. No, but I don't believe I was.

Q. You haven't a distinct recollection whether you was or was not?

A. No, I didn't make any record of when they went up that canyon.

Q. You haven't a distinct recollection of whether you was working on the sixty-foot level or the 85-foot level?

A. No, I can't fix it.

Q. You can't fix it?

A. I can't fix it.

Q. Now, Mr. Searle, why do you judge that a good foundation could be obtained at Hanging rock?

A. From the formation of the country.

Q. From the formation of the country; all that you have to judge by is from your knowledge and experience; you have no other data to go by, have you?

A. Yes, Provo river is pretty good data.

Q. Yes, what does that data consist of to show you that there is a good foundation there?

A. It consists of being the point at which the rapid fall in the stream commences. Somewhere there is a permanent dike across that stream that prevents its cutting, and modifies the grade at this end (illustrating).

Q. Yes, but where that dike is you don't know, do you, any more than your judgment?

A. No.

Q. Now, as a fact, Mr. Searle, has it ever been demonstrated that there is a dike across there which would be a foundation for a dam?

A. It has never been proven, but even if it should be proven that such a dyke does not exist, Hanging rock would still be the best place in that canyon for a dam.

Q. For how large a dam would Hanging rock be the best place?

A. For whatever they are a-mind to build.

Q. For whatever they are a-mind to build?

A. For whatever is feasible.

337 Q. But, Mr. Searle, how large a dam could be built without having a solid foundation, in your judgment?

A. You mean a solid rock foundation?

Q. Yes.

A. Why some of the largest dams in the world are built without that, from 200 to 250 feet high.

Q. How large a dam could be built at Hanging rock without a solid foundation?

A. I think without solid rock, about as large as any one could care to build.

Q. You think a dam could be put in there without having a foundation?

A. I do.

Q. That is your judgment as an engineer that it would be a proper to do that?

A. Yes, a very good clay foundation there would be better for dam purposes than solid rock.

Q. And what would be built on a clay foundation in the shape of a dam?

A. What is that?

Q. What would be built on a clay foundation in the shape of a dam?

A. What could or would be?

Q. Yes, what could; what would be practicable to build on a clay foundation up there in the shape of a dam?

A. Any dam that they would see fit to put up.

Q. Now, excuse me, perhaps I am a little tough at understanding, but do you mean to state, Mr. Searle, that a dam could be built 85 feet high in that narrow canyon with the waters of Provo river as they are in the high-water season, to hold back that water on a clay foundation, 85 feet high?

A. I do.

Q. Now, when did you say you finished the 85-foot survey, Mr. Searle?

A. I said I finished it most of it May 19th, but there was a part at the South fork, if I remember right.

Q. I will ask you whether or not you testified in the examination of this case before that you did the last work on that on the 6th day of June?

A. I would not be certain but what I did testify to that same thing.

338 Q. Well, that would be about the fact, wouldn't it?

A. Why I told you that I finished the main portion of that survey on May 19th; that the South and North forks, the parts running up there I did after those dates and at times intermitting, when I was mapping this work out, and just when they came I don't know. I think I can refer to it.

Q. At the time you was marking around—go ahead and find out?

A. And find those?

Q. Yes.

Mr. HENDERSON: It may take time. Give him a note of it and let him do it outside or tonight.

The COURT: Yes, where that can be done it will expedite matters very much.

Mr. WEDGWOOD:

Q. Well, I will ask you this question, You say you put stakes four feet long, two inches by four all around the 85-foot contour?

A. Yes, sir; two inches by six.

Q. Two inches by six?

A. Yes, sir.

Q. Now was that done on the south side of the river, Mr. Searle?

A. On the southeast side, yes sir.

Q. All the way around?

A. Every point of that contour.

Q. Every point of that contour; you did not do any surveying on that side excepting—your work was all done on the north side?

A. No, sir.

Q. Did you have your instrument over on the south side?

A. I did.

Q. Worked all the way around with your instrument?

A. I did.

Q. The south side?

A. Part of the south side I triangled.

Q. Why did you do that, Mr. Searle?

A. Why.

339 Q. Yes?

A. Because the calculations were easier than it was to cut the brush growing there.

Q. Is there brush all around there?

A. No sir.

Q. What is there besides brush?

A. Why, there is over half of it just as good as it is on the other side to get around.

Q. Well, what is the other half, Mr. Searle, that isn't so good?

A. It is brushy.

Q. Well, is there anything besides brush and good land there?

A. And good land?

Q. Yes, you say over half of it is good working and on the other part is brush, now is there anything else besides good and brushy land?

A. Yes, there is sloughly land that is disagreeable to work in.

Q. Any rock up there?

A. Yes sir.

Q. Some rock that you couldn't work on with your instruments?

A. No, sir; not at all.

Q. Not at all?

A. Not at all.

Q. Nothing to prevent your getting around there with your instrument all the way?

A. Not that I could see at all.

Q. You could work in with your instrument all the way around the 85-foot contour from Hanging rock on the south side clear around?

A. Yes sir.

Q. Now Mr. Searle, you say it would not cost any more to build a railroad 25 feet higher up than where it is laid?

A. No sir; that is my business.

Q. What?

A. No sir, that is my business.

Q. Is there a quick slope to the hill, Mr. Searle, on the south side of the river?

A. Yes.

Q. Quite a quick slope is it a regular hill or does it consist of rolling hills?

A. Why the slope generally is very regular for a distance up beyond where 25 feet would come; some places fifty feet be-
340 yond, and some places a thousand feet higher, straight slope.

Q. Straight slope?

A. Very steep.

Q. There are no gulleys or ravines coming down there or from that distance, what I mean is it wouldn't cut any hills like that along, (illustrating on blackboard) so as to make gullies and ravines along down that line at all?

A. None that are any worse to cross twenty-five feet higher than it would be below.

Q. Well, let me ask you, please answer my question, is the character of that southeast bank of that kind, or is it one continuously level slope along there?

A. Generally you would say it was continuously level slope. There are one or two or three or four maybe of these little ravines coming in.

Q. Well, in your judgment, how many of these little ravines is there coming in?

A. Up to the point that you would go back——

Q. (Int.) From Hanging rock up a mile and a half or two miles I think, two or two and a half?

A. They ain't either one of them over a hundred feet across.

Q. Now, what is the character below Hanging rock?

A. Below Hanging rock?

Q. Yes.

A. For the distance covered by this testimony going up 25 feet.

Q. Well, we will go down now for half a mile?

A. Well, that is generally slide, hill slide.

Q. Sliding hill slide?

A. Slide.

Q. Slide?

A. Slide, brashy, falling of the hillside.

Q. It is broken rock?

A. Yes, clear into the river.

Q. Now, in that half a mile would it be just as cheap to build a road up 25 feet as it would to build it where it is located now?

A. I believe it would be cheaper, Mr. Wedgwood.

Q. Think it would be cheaper?

A. I think it would.

341 Q. For what reason?

A. They get further away from the precipitous steep that breaks into the river.

Q. Well, if it is slide it has all got to be foot-walled, or something of that kind, hasn't it?

A. No.

Q. Is it such as a railroad can be built on that slide, without foot walls there?

A. Yes.

Q. No trouble about that?

A. I don't know just where their survey is there, but the further away they are up to fifty or a hundred feet above the river the cheaper that could be built there.

Q. You mean to say that crossing one of these broken stone slides——

A. (Int.) They ain't broken stone slides.

Q. What are they?

A. It is earth and stone mixed together.

Q. Well, what about is the proportion of earth and stone?

A. Oh, I guess about sixty to forty.

Q. More rock or more earth?

A. I think there is, well, part of it will run more earth, and part will run more rock.

Q. Well, take the general character Mr. Searle, for a half a mile, is it slide ground, or is it solid?

A. It isn't sliding material now.

Q. It isn't sliding material now; then you mean to be understood that it is solid for that half mile?

A. It is material that has slid in there, that is loose rock that silted out, and earth that came in there, and probably stand about half and half, a very good material if they can get away from where the river is washing out the immediate base of it.

Q. Probably I misunderstood you; now going down the river for a distance of three miles, what is the character, going down the river?

A. Sir.

Q. What is the character going down the river for two or
342 three miles?

A. It is generally this same class of material.

Q. Any solid rock there?

A. Where their line is located?

Q. I mean the wall of the canyon is what I asked you?

A. The walls of the canyon are solid rock all the way up.

Q. The walls of the canyon are solid rock all the way up?

A. But they are a quarter of a mile out from the river at the point we are speaking of.

Q. I say going down the river three or four miles is there other points where there is solid rock there?

A. There are points of solid rock that come right up to the edge of the water.

Q. Well, most of the way there is a bench, a narrow bench, coming down to the river for three or four miles?

A. A narrow bench?

Q. That is a narrow strip of land above the water which ordinarily is not flowed with water before you come to the rocky side of the canyon?

A. In some places it is cut off entirely.

Q. I say ordinarily?

A. Oh yes.

Q. The most of the way; there is a chance to build a railroad without doing much solid-rock cutting, isn't there, if you keep down pretty near, within a few feet of the level of the stream?

A. It wouldn't cut much figure except——

Q. (Int.) Just answer my question, Mr. Searle; there is a chance to build a railroad, if you keep down the stream without doing much solid-rock cutting, isn't there?

A. Yes.

Q. Now if you start so as to overcome a grade of 85 feet at Hanging rock, it would pass through a great deal more of rock-cutting, wouldn't it?

A. Now you are talking about a railroad that you want to have stay there, ain't you?

Q. Yes, I am talking about a railroad constructed.

A. And you want me to answer those questions as to whether it is feasible to build it where you want to.

Q. I don't think there is any necessity of your arguing; you can answer the question if you understand it.

343 The COURT: If you understand it answer it, and if not, ask for an explanation.

Question read as follows:

Q. Now, if you start so as to overcome a grade of 85 feet at Hanging rock, it would pass through a great deal more of rock-cutting, wouldn't it?

Mr. WEDGWOOD: Solid rock?

A. I think it would be, and be benefitted thereby.

Q. Never mind, you can answer the question, Mr. Searle; now Mr. Searle, you said the railroad could be raised at Hanging rock, a grade of 25 feet, and then in a mile or so it would be down to the original grade?

A. Yes.

Q. Now, I will ask you if you know of grades being built in that way where it is possible to obtain a continuous grade one way or the other, whether it is considered proper engineering to put in an adverse grade?

A. No, it isn't considered proper engineering to put in an adverse grade; I have not advocated it neither.

Q. Mr. Searle, how many stakes did you set on the south side of the river?

A. Over two hundred.

Q. What?

A. Over two hundred.

Q. Over two hundred; they are all marked, on the south side of the river?

A. Every one.

Q. And how were they marked?

A. "Water level Provo Canyon reservoir."

Q. What with?

A. What is that?

Q. What with?

A. A carpenter's lead pencil.

Q. What kind of pencil?

A. With a plain surface.

Q. Where did you get that?

A. Bought 'em *to* the Smoot Drug Company some of them, and some of them I got from a man that was doing a lumber business in the South fork.

Q. How many miles would that two hundred cover?

A. That two hundred covered nearly six miles; there are
344 over 400 on the two sides of the river, about eleven miles around.

Q. Well, how far would it be apart the 200 that are on the south side of the river?

A. Well, they would average a little over a hundred feet apart.

Q. They would average a little over a hundred feet apart; how many miles around?

A. Eleven miles.

Q. Eleven miles around it?

A. Maybe I am mistaken in figuring it up; a little over four hundred on both sides.

Q. A little over 400 and be a little over 400, a hundred feet apart in eleven miles?

A. Well, that is what I guessed it.

Q. Well, guess again, Mr. Searles?

A. Yes, a little over a hundred feet apart.

Q. It would lack fifteen or sixteen hundred feet wouldn't it?

A. I guess not.

Q. Figure it on the blackboard there?

A. Eleven miles and three or four hundred stakes.

Q. A little over a hundred feet apart, see how it can be demonstrated?

A. I don't know whether I could or not (figuring) 145 feet and a fraction.

Q. Well, we disagree slightly on that?

A. All right.

Q. About a thousand. Now, Mr. Searle, raising the water 25 feet above the present grade of the railroad at Hanging rock how far would that flow the water back?

A. Twenty-five feet.

Q. Yes, above the present grade of the railroad.

Mr. HENDERSON: Above the present grade of the railroad?

Mr. WEDGWOOD: That was the question Mr. Bailey asked, 25 feet?

A. In the neighborhood of the North fork.

Mr. HENDERSON: Well, I didn't understand him to ask that, Mr. Wedgwood; I don't think it was as to raising the water 25 feet above the present grade of the railroad, but to raise the water 25 feet above the surface of the river.

345 Mr. WEDGWOOD: Well you have been asking questions all along on the hypothesis of raising this water 25 feet.

The COURT: As to the surface of the water?

Mr. WEDGWOOD: No, taking the grade they are on.

Mr. BAILEY: It is my recollection that I asked how high the 25-foot dam would raise the water with respect to the Ferguson land.

Mr. WEDGWOOD: And then I want to know how much more it would cover; that is what I am asking.

(Some discussion between counsel.)

Mr. WEDGWOOD:

Q. Well, you answered that question to Mr. Bailey then, that a 25-foot dam would cover all the Ferguson land; what do you mean by a 25-foot dam?

A. I understood a dam to raise the water there 25 feet above high-water mark.

Q. Twenty-five feet above high-water level?

A. Yes.

Q. Now, do you know what high-water level is with reference to the present grade of the railroad there?

A. No, sir; because I never took any levels on the present grade of the railroad.

Q. Now, how far back would a dam twenty-five feet above high-water level flow water?

A. Why, half way between the South and North fork.

Q. Half way between the South and North fork?

A. Yes.

Q. Well, South fork, how far is the South fork from Hanging rock?

A. About a mile.

Q. A mile; South fork is on the Ferguson land; how far is the North fork, from Hanging rock?

A. About two miles and a half, I think.

Q. Now, how far above the east end of the Ferguson land would the North fork be, I would like to know, approximately?

A. Well, now Judge, you have me, because I don't know where the boundary lines of the Ferguson property are.

Q. Well, will you look at that, Mr. Searle, there are maps
346 here of this — and——

A. (Int.) Yes, sir, if I can see one of your maps.

Q. Not now, you can do it at night. Now raising the water 85 feet Mr. Searle, how far would that flow the water back?

A. Five miles and a half.

Q. Five and a half?

A. Yes sir.

Q. And where would that bring it?

A. That would bring it to, I don't know just how to describe that so you will know it. You know where Hoover's ranch is?

Q. Well, about how far above the North fork, or how far below Deer creek, approximately between those two?

A. Why, as near as I can remember, it is about a mile and a quarter below Deer creek, about a mile and a half.

Q. That would submerge the county road, as it now exists?

A. Part of it.

Q. Well, it would submerge it down to this end many feet under water, wouldn't it?

A. Quite a good deal of it at this end.

Q. Now, how far would it flow the water up South fork?

A. Up South fork?

Q. Yes?

A. It is about 1,500 feet.

Q. It would flow it up South fork about 1,500 feet; now how much water would that contain, Mr. Searle?

A. If I remember right it is in the neighborhood of 780——

Q. (Int.) What would be the pressure of that reservoir full of water at the bottom of the dam to the square inch, or square foot?

A. To the square foot?

Q. Yes, if you haven't got it at hand, why figure it out and let us know in the morning.

Mr. HENDERSON: The 85-foot dam?

Mr. WEDGWOOD: Yes. What area would the reservoir cover 85 feet?

A. And I have that, I can bring it in the morning for you.

347 Q. And what area would the water cover at a 25-foot level?

A. Well, that will have to be calculated from the other notes.

Q. Now in speaking of the 85-foot level and the 25-foot level reservoirs, I will ask you if they are all figures from the high-water point?

A. How was that?

Q. In speaking of the 85-foot and sixty-foot and 25-foot, are they all figured from the high-water point?

A. The 85 and the 600 foot levels as I told you are figured from 85 and 60 feet above the water level at Hanging rock.

Q. Well, would that be high or low water level?

A. Of they are taken from the water level on March 27th when I set the 60-foot stake up there. The 25-foot is something that I know nothing more about that—except that it is mentioned here; and when he said a 25-foot dam I didn't suppose that they would mean that because it would not convey——

Q. Excuse me, I understood you to say that when you first established that grade, the base that you took to work from was the water level on March 27th, was at Middle rock?

A. Yes, sir.

Q. The sixty feet?

A. Yes sir.

Q. And then when you took the level at Hanging rock, you took that basis to establish the 85-foot level?

A. Yes sir.

Mr. HARKNESS:

Q. Then you are mistaken when you state the basis was Hanging rock? The basis was Middle rock.

A. The basis was Middle rock.

Mr. WEDGWOOD: One more question, Mr. Searle, at Hanging rock on either side of the river, raising the grade up 25 feet would make a solid-rock cut there wouldn't it?

A. For a railroad?

Q. Yes.

A. Short one.

Q. How long a one?

A. About a hundred feet.

Q. About a hundred feet, and that would not be necessary at the grade as now established?

A. I believe it would take just about the same amount of cut.

348 Q. Think it would take about the same, hundred feet of cut?

A. I think that it would, from the way the line seems to come around there. Their grading is entirely above Hanging rock.

Q. Well, just answer the question, on the grade as established now, would there be any more or less rock cut, 25 feet above the high-water level of the river than there is at the present grade?

A. I think no more, possibly less.

Q. You think no more. That's all.

Adjournment taken until Thursday April 21st, 1898, at 9.30 a. m. Thursday, resumed session.

The COURT: When the question — submitted to the court on yesterday evening in regard to the admissibility of certain documents as evidence, the court is of the opinion that there *be* but one purpose for which they should be admitted, and that is the question of showing the adoption by the plaintiff company of the line or the land, but all other purposes I do not think it should be considered, and the court so rules.

Mr. HARKNESS: We wish to reserve the right to offer it hereafter in case——

The COURT: Well, so far as the court doesn't think that it is proper testimony, or proper to be admitted for any other purpose. To show the fact that the plaintiff company adopted that land, in so far as it shows that; I haven't looked over that question as to the weight of it or anything of that kind, but I think it should be admitted for that purpose.

Mr. HENDERSON: Well, if I understand then, the court would admit it for that purpose only, for the purpose of showing that they were—it isn't a judgment, yes, in view of the——

The COURT: No, but it is——

Mr. HARKNESS: Well, that is a question we desired to have——

349 The COURT: That the court don't know, but it was offered and the court doesn't remember *just* the language used, but it was offered for any and everything else, and I think that is clearly wrong, but to show the good faith, or the reasonableness or that the plaintiff company adopted that piece of land, or that line.

Mr. HENDERSON: Yes, what I was going to say, it would only be admitted merely for the purpose of showing the fact, but its details are of no account.

The COURT: Well, that is another matter.

Mr. HENDERSON: We will except to the receipt of it for any purpose.

Mr. WEDGWOOD: So far as details show that fact.

Mr. HENDERSON: So far as description is concerned that is shown from testimony outside of the details of it.

W. B. SEARLE, recalled for further cross-examination, examined by Mr. Wedgwood:

Q. Mr. Searle, you were to look up your notes to see if you could tell what date it was when you finished the 85-foot contour.

A. Sir.

Q. You were to look up your notes to see if you could tell what date it was when you finished the 85-foot contour?

A. Was I, well, I neglected that part of it, I——

Q. Well, you may just make a little memorandum of that and look it up.

A. All right.

Q. Did you give us the area of the last one, of the 85-foot contour, the surface area?

A. No; I can give you that this morning 269 and $\frac{2}{10}$th- acres.

Mr. HENDERSON:

Q. How much?

A. 269 and $\frac{2}{10}$ths acres.

Mr. WEDGWOOD:

Q. And $\frac{6}{10}$ths, you say?

A. 269 and $\frac{2}{10}$th-.

Q. Now will you give us the capacity in gallons of that reservoir?

A. Of the reservoir?

350 Q. Yes, of that 85-foot contour, what the capacity in gallons would be, of the water raised to that height at that contour line?

A. I can't give that exact, but I can give it as we have estimated it to be.

Q. Well, you may give it approximately.

A. It is four thousand millions of gallons.

Q. Four thousand million gallons?

A. Approximately.

Q. How did you arrive at that, Mr. Searle?

A. Why, roughly, by a line of levels at the bottom of the canyon, and cross-sectioned at the end, the cross-sections that were taken at the South fork, and the——

Q. Let me see if I understand you: it would be, the shape of the reservoir would be something like that, but of course varying in width (illustrating on blackboard).

A. Yes and the distance up the canyon.

Q. Yes, of course, it would be more shallow as you go up?

A. Yes, sir.

Q. You mean that you have taken a line of levels as you went up from the center or middle rock?

A. Yes, sir: by the way, you have exaggerated that height. The width from narrowest point would only be across the top.

Q. Well, you can draw your reservoir line there any way you want to so as to indicate yourself?

A. Yes.

Q. Supposing the 80-foot contour line is there, then you simply run that contour line around it (illustrating)?

A. Yes.

Q. And taking the cross-section at the proposed dam?

A. Yes.

Q. You did take a cross-section at the proposed dam?

A. Yes.

Q. And a cross-section at North fork?

A. I cross-sectioned South fork.

Q. South fork?

A. Yes sir.

351 Q. Well, how far would that be above proposed dam?
A. That is about a mile and a quarter.
Q. Yes, and that is all the data you have, or have had for determining the capacity of that reservoir?
A. Yes sir.
Q. You made no cross-sections of it anywhere excepting those places?
A. That is the only cross-sectioning of the length, and the cross-sectioning of those two places at the width.
Q. Now, Mr. Searle, I will ask you to tell me what the pressure would be at the bottom of the dam, with the water raised to that height, the 85-foot contour?
A. You ask per square foot, did you not?
Q. Yes, per square foot?
A. Five thousand younds, 5,300.
Q. Five thousand pounds to the square foot; how many square feet would there be, Mr. Searle, in the 85-foot dam.
A. That had a five thousand pound square pressure on it.
Q. No, I will ask you that bye and bye; how many square feet would there be in a dam at Hanging rock with a height of 85 feet?
A. I didn't look that up for you, Judge, it wasn't asked.
Q. Well, just make a note of that. I would like to know, Mr. Searle, and I, would also like to know what the average pressure per square foot would be upon that dam, the water raised to that height.
A. The average pressure per square foot?
Q. Yes?
A. For the surface area?
Q. Yes. You need not figure it up now; you can figure it when you figure the surface area of the dam.
A. Yes, it can only be obtained accurately from the surface area of the dam.
Q. Yes, I understand that. Now, Mr. Searle, at Hanging rock there are some rocks on each side of the river somewhere?
352 A. Yes sir.
Q. Suppose that is Hanging rock, now I suppose the scheme in building a dam, if one was built, would be to firmly anchor that dam to those rocks on the side?
A. Why the rocks on the side would simply add strength.
Q. Well, they would be a part of the dam wouldn't they?
A. Not part of the built dam.
Q. Not, but after the dam——
A. It would be built against those rocks?
Q. But after the dam was completed they would constitute a part of the dam?
A. Yes.
Q. They would be incorporated into it?
A. Yes.
Q. Yes, and of course after the dam was built there would not be any such thing as a give between the artificial part of the dam and the natural-rock side?

Mr. HENDERSON: Any such thing as what?

Mr. WEDGWOOD: As a give?

A. No, the joint there in the rocks would cover all those things back.

Q. So it would be one solid mass there?

A. Yes.

Q. Now, Mr. Searle, if a dam was put in 85 feet high on a clay foundation, clay bed, wouldn't that clay bed settle?

A. It might to a slight extent except it was provided against.

Q. Well, would it be practicable to provide against that clay bed so that it would not settle?

A. Yes, as I told you yesterday, some of the largest dams in the world are built without being on a rock foundation.

Q. You think that an 85-foot dam could be put in there on a clay bed so that it would not settle down on that clay bed?

A. Without any question. The danger to rupture would be less than on solid rock.

Q. Less than on solid rock; now there is no natural clay bed there?

A. That we know not.

Q. Well, as far as you know?

A. I do not know.

353 Q. I said as far as you know, Mr. Searle?

A. I say I do not know.

Q. Well, please answer my question, Mr. Searle, as far as you know there is no clay bed there, is there now?

A. No.

Q. And as far as you know there is no clay anywhere in that vicinity that would make a clay bed?

A. Yes.

Q. Where?

A. It shows long the river above.

Q. Tell me where there is a clay bed that would make, that you could take clay from to make a foundation for a dam of that kind?

A. That is impracticable, to take the clay from some place else to make it.

Q. Oh, then I misunderstood you; then there would have to be a natural clay bed there in order to build a dam?

A. In order to build a dam.

Q. Yes.

A. No, sir; not a clay bed, but a natural bed of some material upon which you could build a dam.

Q. Yes, but we are talking about clay, Mr. Searle; now you don't know that there is any natural clay bed there, do you?

A. I do not.

Q. And you don't know that there is any bed rock there at that particular place?

A. I do not.

Q. Then to build a dam there it would be absolutely essential either that there be a natural clay bed there, or that there be bed rock?

A. Neither were absolutely essential.

Q. Well, you don't know that either one of those exist there do you?

A. I do not.

Q. Well, now, in what manner could an eighty-five-foot dam be built there without those two elements being present.

A. A dam could be built there with any other material perfectly safe that is found in that canyon to my knowledge, It might be possible that there exists there quicksand on which a dam could not be built, would not be safe.

Q. Yes, I am asking you, Mr. Searle, to tell us how. That is a mechanical proceeding to be gone through with there to
354 build a dam without a natural clay foundation or a bed-rock foundation.

A. Well, the proceeding would be very much the same, and the material would determine exactly what we were going to do.

Q. Yes, Mr. Searle, that is true possibly, but I want you to tell me so that I will know that is true; tell me what you would do, how it would be done?

A. Well, mention your material and I will tell you how to do it.

Q. No, I will let you do that, you mention any material, any then tell us how it would be done, I don't wish to limit you.

A. All right; on an ordinary bed of earth and material that is deposited by Provo river, which is impervious to water the plan of building that would entirely be the same with the exception of the base. I suppose you understand how to build a masonry dam there?

Q. Well, a dam that woud be builit there 85 foot high, would it or would it not be a masonry dam?

A. That depends entirely on what we find at the bottom.

Q. On what you find at the bottom, now starting with that knowledge you have, Mr. Searle, with that as the bot-om of the river, and this representing the sides, you may draw your own diagram, not knowing whether there is any clay foundation or bed-rock foundation, and you had to put a dam in there, tell me what you would do?

A. I would immediately ascertain if there is any such a foundation within a reasonable distance.

Q. What do you mean by a reasonable distance, down in the ground?

A. Yes.

Q. Well, supposing that it is determined that there is no natural clay bed there, or any bed rock, tell us what you would do, Mr. Searle, to build a dam; you may illustrate it on the blackboard if you want to?

A. Well, in that case I would commence and cross-section
355 across down the canyon the other way, assuming that it is as bad as it possibly can be.

Q. Well, just run that out if you want to, and illustrate.

A. And let this represent the bottom of the canyon, and here we wanted to put this dam, we would build here either a mass of masonry or loose rock at this point, which would have a construction

if loose rock something like this, and if masonry less. This part of this would all be filled in with the earth washed down by hydraulic process from the sides of the canyon filling this back for from anywhere from 3,000 to 4,000 feet all told.

Q. This here represents the, just for illustration, I will cut that off, and did you say what that represented?

A. It is a cross-section between Hanging rock.

Q. This I suppose in here repres-nts the river bed between Hanging rock and this down the river?

A. Yes, that is all right only you have drawn that a little large.

Q. Yes, of course, it is large?

A. Make your Hanging rock about this wide and it would be better.

Q. Now, do I understand you Mr. Searle, that this would be masonry?

A. I said it might be masonry; it might be dry stone wall, and this would be an impervious protection to the water.

Q. That would be either masonry or dry stone——

A. Well, a wall, anything that——

Q. (Continuing:) In order to build a practical dam there?

A. Well you are making that——

Q. Would it be Mr. Searle?

A. I said it would be either one or the other.

Q. Either loose rock?

A. I didn't say loose rock, I said a dry stone wall, that would be stone laid in without mortar.

Q. Without mortar?

A. Or laid in with water cement either one, yes.

Q. Now do you mean to say Mr. Searle, that you would build this first here right on the bottom of the bed of the creek as
356 it stands there now?

A. No sir.

Q. Well, what would you do below the bed of the creek is what I am trying to get at?

A. I would make an excavation somewhere from eight to twenty feet, maybe more than that, deep, and if I would get as good material beyond I would make a bond between the existing land and the base of this stone that I put in and which this land would wash in.

Q. Well, we will get to that in a moment, Mr. Searles, I would just like to get at this bottom; you would excavate from one bank to the other a trench in the creek there, from six to twenty feet deep, the first thing?

A. No, sir; I didn't say I would; I said I would see what the bottom was first.

Q. You would see what it was?

A. Yes.

Q. Now, I am neither supposing that you found there bed rock or a clay bed there, what would you do?

A. I would excavate such a trench.

Q. From six to twenty feet deep?

A. Yes, to the full extent of this base, which would be four times 85, 300 feet across there, 300 feet wide.

Q. And then what would you put in there?

A. I would fill that with the same material.

Q. With either dry rock work or masonry rock there?

A. Yes, with a clay wall in front of it.

Q. With a clay wall in front of it?

A. Yes.

Q. And then after that was done you would fill in the masonry dam?

A. I would fill in the masonry dam, yes.

Q. 85 feet high?

A. No.

Q. How high would it be?

A. I would keep this material coming in here just as fast as that——

Q. (Int.) As fast as the work progressed you would back it up?

A. With this material yes.

357 Q. What material would that be?

A. That would be the present existing side of Provo canyon. It has a pretty fair per cent. of clay in it. It is impervious to water.

Q. And when you got up to 85 feet here you would back it up with this material for how far back?

A. Well, probably three or four thousand feet.

Q. Three or four thousand feet?

A. Yes, up to the Ferguson farm.

Q. And there would be here then something like about 110 feet, from 95 to 110 feet of masonry right up and down?

A. Yes.

Q. Now, how wide would this be?

A. That would depend on whether it is masonry or the rock we speak of.

Q. Well, if it was put in with dry rock how *how* would it be?

A. I think that the calculation of the weight of the stone and the strength necessary in there would show that that ought to be ninety feet on the base. I may be mistaken about that.

Q. And how much would it be if it was laid up in cement?

A. That is what I say, cement and mortar, first-class work it ought to be about ninety feet wide at the base.

Q. And dry rock?

A. In that case the slope ought to be two to one on one base and three to one on the other, which would make something like three hundred feet on the base.

Q. Now, do you mean to say, Mr. Searle, that a rock work of that character, placed in a trench six to twenty feet deep, without clay foundation, or bed rock, wouldn't settle vertically?

A. No, I don't mean to say it wouldn't settle vertically, but I mean to say that the settlement would be so slight that the permanency of the rock would be absolute.

Q. And would not break the side walls?

A. And would not break the side walls.

Q. Now, Mr. Searle, can you find any example, do you know of any example in the world where a dam has been built that way?

358 A. I cannot call your attention to one now, but I can do so when I come in with the rest of these reports.

Q. You don't know of any example laid down in the books where a dam has been built in that way, do you?

A. I cannot give you the name of it; I do know of such conditions.

Q. Now, so far as you know, what you have stated here is just as definite as any of the plans or calculations were ever made up there in regard to any dam?

A. No sir.

Mr. HENDERSON: Wait a moment, I object to that, if the court please, as not cross-examination, and as based upon——

Mr. WEDGWOOD: I will withdraw it at the present time.

Mr. HENDERSON, continuing: Something that has not appeared in the case in any way.

Mr. WEDGWOOD: I will withdraw it at the present time.

Q. Do you remember seeing Collier up the canyon?

A. Yes sir.

Q. And you saw him about the 14th of April?

A. No sir.

Q. When did you first see him?

A. I cannot give you that date.

Q. Well, do you know it wasn't the 14th of April?

A. No, my memory was that it was somewhere from the middle to a little later in April.

Q. Well, when did you see him upon the Ferguson place?

A. I saw him later than that. The first time I saw him I didn't see him there.

Q. You saw him later upon the Ferguson place?

A. Yes sir.

Q. Well, how much later, was that from the time you first saw him?

A. Sir?

Q. How much later was that than the time you first saw him, how long before that did you first see him, in other words?

A. I think that time that I saw him on the Ferguson place was at least a week maybe two weeks later than when I first saw him.

359 Q. You might have seen him ten days before you saw him up there on the Ferguson place?

A. Yes, when I first saw him I didn't speak to him.

Q. Well, then, if he was up on the Ferguson place on the 14th you saw him there on or about the 14th, and you saw him ten days prior to that time, or two weeks prior to that time, you saw him before your book shows that you commenced on the sixty-foot contour, didn't you?

A. I did not see him at the Ferguson place on the 14th.

Q. Well, I say if you did see him about that time, you say you don't know, will you swear that you didn't see him about the 14th or about there?

A. I wouldn't swear that I did not see him, but as to where I saw him, I know I didn't see him there on the 14th.

Q. You know you didn't see him there on the 14th? How do you know that?

A. Because my work wasn't there, and it would be impossible for me to see him.

Q. Well, wasn't you working on the sixty-foot line on the 14th?

A. I think I was a little above there.

Q. Above there, wasn't you working between the Ferguson place and Hanging rock, or Middle rock on the 14th?

A. No.

Q. Let me ask you if you recall seeing Charley De Mosiy and Don Coray or Barney or Taft in a buggy in the canyon about that time?

A. I didn't see them; I was told that they went up.

Q. Well, now, you were told that they went up; when did you see Collier with reference to that time?

A. I don't remember.

Q. You don't remember; you did see him about the middle of April?

A. I think I did, near Thayer's.

Q. The second time?

A. No, I didn't say that.

Q. Well that is you saw him that time, and you had seen him before that but didn't speak to him?

A. I am certain that I saw him in the canyon. I had seen Mr. Collier that spring.

360 Q. That spring?

A. Yes, I don't think I saw him in the canyon about the middle of April.

Q. Well now didn't you *don't* know, didn't you have knowledge that the engineers were in the canyon prior to the time you saw Collier?

A. Yes.

Q. Now how long prior to the time you saw Collier was you aware that engineers were in the canyon besides your own men?

A. Possibly a day or two.

Q. Possibly a day or two?

A. Yes.

Q. Not more than that?

A. I don't think so.

Q. You don't think so; now where did you see Collier when you first saw him?

Mr. HENDERSON: Well, when he first saw him, in the canyon do you mean?

Mr. WEDGWOOD:

Q. Yes, in the canyon?
A. My memory is that I saw him at Thayer's place.
Q. At Thayer's place?
A. Yes sir.
Q. Now, was that before or after you saw him on the Ferguson place?
A. That was before I saw him on the Ferguson place.
Q. Now about how long before you saw him on the Ferguson place was that?
A. I can't remember the exact days.
Q. Well, your best judgment, Mr. Searle?
A. I should say three or four days.
Q. Three or four days?
A. Yes sir.
Q. What date did you see him on the Ferguson place?
A. I didn't say, I don't know.
Q. Can't give it; now how long prior—you was at work on the sixty-foot level when you saw him at the Ferguson place?
A. I can't be sure of that. I think I was working on the 85.
Q. Think you were working on the 85?
A. Yes sir.
Q. Well, have you anything to fix it in your mind?
A. Only that I was working up above where he was working, I saw him as I came back from my work.
361 Q. Well, the sixty-foot level would be above where he was?
A. And what fixes it in my mind is that he didn't reach the Ferguson place until after I was working on the 85.
Q. The sixty-foot would be above where he was working?
A. Yes sir.
Q. Are you willing to swear as an actual fact that you know it was a fact that he did not reach the Ferguson place until after you was working on the 85?
A. I am willing to swear that he didn't reach there with his line.
Q. That he was not working there with his men and with his instruments until after you was working on the 85-foot level; are you willing to swear to that?
A. To the best of my knowledge and belief.
Q. Well, I am not asking you as to your belief, Mr. Searle, I am asking you as a fact within your personal knowledge?
A. Well, I am giving you the best of my personal knowlegde.
Q. Well, have you personal knowledge?
A. I do.
Q. Well have you personal knowledge that he was not up there working with his instruments on the Ferguson place before you went to work on the 85-foot contour?
A. I did not see him before that.
Q. That is true, admit that as true, please answer my question, Mr. Searle, will you swear as a fact that he was not there?
A. No, it is possible for him to have been there.

Q. Now how many days before you saw him at Thayer's did you know that he was in the canyon?

A. I can't tell you.

Q. About how many?

A. Very few days.

Q. Well, about how many would it be?

A. Not over two or three.

Q. Not over two or three; will you swear that you did not see Collier before the 25th day of April?

A. How is that?

362 Q. Will you swear as a fact within your personal knowledge that you didn't see Collier before the 25th day of April?

A. I have already——

Mr. HENDERSON: Just a moment. Now, I object to that if the court please.

The COURT: Read the question, Mr. Reporter. (Question read.) The objection is that the matter has been asked and answered several times?

Mr. HENDERSON: Yes, several times, and he said repeatedly that he did not keep the exact dates: he stated the best he can.

The COURT: I think he has.

Mr. HARKNESS: If the court please, the witness has said repeatedly that he commenced the 85-foot contour on the 25th day of April.

Mr. HENDERSON: April 4th.

Mr. HARKNESS: Perhaps I am mistaken, if I am correct he said the *the* 85-foot contour on the 25th day of April. Am I correct, Mr. Searle?

A. I believe you are.

Mr. HARKNESS: Now the question is did you see Mr. Collier before the 25th day of April.

Argued to the court.

The COURT: Well, can the witness answer as a fact, Mr. Searle?

A. I can answer his question as a fact.

Mr. WEDGWOOD: Read the question, Mr. Reporter.

Question read.

A. No I have already stated that I did see him about that time, but not at Ferguson's.

Q. Well you are prepared to say as a fact that you didn't see him at the Ferguson's place or above Hanging rock in there somewhere, prior to the 25th day of April?

A. Yes, I think so.

Q. Well are you?

A. Yes, I am very confident I did not see him there before that time.

363 Q. Have you a distinct recollection?

A. I have a distinct recollection of seeing him May 14th, and I think that is the first time I saw him as high as that.

Q. What is that you say?

A. I say I have a distinct recollection of seeing Mr. Collier on May 14th there at the Ferguson place. I believe that was the first time that I saw him there.

Q. Now, isn't it possible that you are mistaken as regards it being May 14th, and that it was April 14th?

A. Not a bit of it.

Q. Can't it be possible?

A. I saw him *him* on May 14th.

The COURT:

Q. Anything further:

Mr. WEDGWOOD: Yes, I want to ask him one more question, now in order to fix it, I wish you would just give me the distance Mr. Searle, so that we can get that, from Hanging rock to Middle rock is how far?

A. 950 feet.

Q. Now from Middle rock down to where the flume grade, or from Hanging rock to where the flume grade that you worked on in March connected with the river, how far?

A. Fifty feet—oh, did you say Middle rock or Hanging rock?

Q. I said Hanging rock?

A. Well, that would be a thousand feet.

Q. A thousand feet; then it would be fifty feet below Middle rock?

A. That is my memory; it is just below Middle rock we abandoned four or five hundred feet of head-work there.

Q. That is just what I want to come at now, then from where the flume grade that the flume was built on, being built on at about the time of this suit, from Hanging rock to the place where that connected with the river, how far?

A. To where the work that we were then doing connected with the river?

364 Q. No, was the brush cleared off and the flume bed prepared on the exact place where you ran the levels in March, 1896?

A. There were none cleared off then.

Q. Well, was there afterwards?

A. Yes sir.

Q. You said you abandoned some four or five hundred feet of head-work?

A. Yes.

Q You mean by that you connected with the river four or five hundred feet lower down?

A. Yes sir.

Q. Now, how far from Hanging rock to the place where you did connect, how far was that?

A. Fourteen or fifteen hundred feet.

Q. Now, is that the diverting dam there?

A. Yes sir.

Q. That is the location of the diverting dam?
A. Yes.
Mr. WEDGWOOD: That is all for the present; we would like to reserve a right to ask him a few more questions. We have got to get some data.

Redirect examination by Mr. HENDERSON:

Q. Mr. Searle, I want to ask you if you have taken accurate measurement of the difference in altitude on the surface of the water between what is called Middle rock and Hanging rock? They are 950 feet apart, as you say?
A. I did along in '96.
Q. You did in '96, you say?
A. I did take that record in '96.
Q. Well, that doesn't change, does it; that is a permanent mark isn't it?
A. Yes.
Q. It would be the same in '97 as it would be in '96, and the same in '94, that it would be in '96?
A. It will probably be the same, within a slight variation today.
Q. Now, just state what that difference is?
A. Two feet and three-tenths.
Q. Two feet and three-tenths?
A. Yes sir.
3641/2 Q. They are substantially then the same level? There being then only that difference?
A. Yes.
Q. Now you stated that in March you commenced surveying the contour line, as I understood you?
A. Yes sir.
Q. And did you give the date?
A. No, I stated that I established the first point of the contour line in March, and commenced surveying around it in April.
Q. Now that was at the 85-foot level?
A. At the sixty-foot.
Q. I mean the sixty-foot level?
A. Yes sir.
Q. And I think you testified that it was April 4th, did you not, that you commenced this performance?
—. In the same book that Mr. Wedgwood called my attention to I find that he overlooked one page, and I find that April 3rd is noted on one page in front of it.
Q. And that it was April 3rd that you commenced that?
A. Yes.
Q. That is the level of the flume that was run down to the river from that point, or down the canyon?

Mr. WEDGWOOD: We object to that as leading.

Mr. HENDERSON:

Q. Well was it on the level with that?

A. It was the level of a flume which was carried through to the mouth of the canyon.

Q. Mr. Searle, do you know what the purpose was of running those two contour lines there?

A. Yes sir.

Q. What was it?

A. It was to determine——

Mr. WEDGWOOD: Wait a minute, we will object to what the purpose of running this was. Tell, what, if he wants, tell what was done on them.

The COURT: I think he can answer the intent or purpose.

Mr. HENDERSON: Go, on, Mr. Searle, what was it?

A. It was to find the area of the canyon on both levels.

365 Mr. WEDGWOOD: Just one moment, Judge Henderson, I understand the purpose, was the sixty-foot and the 85-foot.

Mr. HENDERSON: Yes.

Q. Now, state whether with those two you could determine the area in between the two levels?

A. Could determine as accurately as it would be possible to do, the amount of water that could be filled in between the two levels.

Q. Yes, between the two levels; state whether if the water was taken out on this flume line that was run on this sixty-foot level whether from that data you could use the storage capacity that there would be above the sixty-foot level?

A. I could.

Q. Now, you were examined by Mr. Wedgwood at great length about railroads going up there, and the railroad grade going up there; going back down the stream a half a mile from Hanging rock, and you have heard the testimony here, have you, about what the percentage of grade is down there covering that distance?

A. I think I did; my memory is that they testified that it was less than one per cent.

Q. Well, you know approximately what it is anyway?

A. Yes, sir.

Q. State whether or not it is feasible to commence a half a mile back there and increase that grade one per cent. for a half a mile?

Mr. WEDGWOOD: We object to it. The matter was brought by Mr. Bailey in direct examination, and I simply cross-examined him upon it.

Argued to the court.

Mr. HENDERSON: Well, I don't care enough about it to take any time. He wasn't asked however about the percentage of grade up there; that was the point I was going to call his attention to anyway. It is however stated by their engineers, so I don't think it necessary to take any great time about it. There is no controversy about it because they themselves state it.

366 Q. Mr. Wedgwood asked you if it was in railroad work quite unusual in going up a canyon to make an adverse grade, as you call it, and I believe you stated that it was?

A. Yes sir.

Mr. WEDGWOOD: Was not?

Mr. HENDERSON: Was not? No, he stated that it was contrary to the custom.

Mr. WEDGWOOD: Yes; yes.

Mr. HENDERSON:

Q. Now, supposing that Hanging rock is at this point and the railroad is making its ascent up the canyon here and until it strikes that, if a dam is raised there so as to get over the dam at a safe distance above it and above the water if water was raised in that, it would not be very practicable there would it to make an adverse grade and go down into the water there; you would have to follow that water level there?

A. That is right.

Q. Would it be possible under such circumstances to make any adverse grade at all?

A. Not unless they unnecessarily raised their grade over the dam.

Q. Well, I am speaking now if they raised it just enough to get safely over the dam?

A. It ain't practicable to put an adverse grade in there.

Q. They would simply if they skirted the dam, they would be on an absolute water level?

A. Exactly.

Q. And would come back to the original line where they got to where they stopped raising the water?

A. Yes sir.

Q. You have been examined by Mr. Wedgwood at great length also about building the dams up there, and the building of one eighty-five feet high. I want to ask you about the building of a dam in there at Hanging rock, or Middle rock either, selecting supposing that a site was to be selected at or near those places,
367 which would be the most feasible for a dam about, building a dam there twenty-five feet high, state whether that would be practicable?

A. Yes sir.

Mr. WEDGWOOD:

Q. If the court please, we object to it; there is nothing in the pleadings in any way shape or form or manner, no foundation for a twenty-five-foot dam; no claim for it. They start out here with an issue joined claiming the right to hold this canyon for an eighty-five-foot dam. There is no issue joined here. Have no preparation for any 25-foot dam in any way.

Mr. HENDERSON: If the court please, in pleading, the greater includes the less. Is it possible that they are going to change positions here and insist on an 85-foot dam. If they do want to get behind that dam, we want to know their position in this case——

The COURT: I think the court will hear the evidence.

Mr. WEDGWOOD: Give us an exception.

A. Yes, sir it is practicable.

Mr. HENDERSON:

Q. State whether a dam of that height could be raised there with perfect and absolute safety to the dam and to the water-course?

A. Yes sir.

Q. Have you made any calculations either accurate or approximate of the area that that would cover, how far it would set the water back?

Mr. HARKNESS: One moment, I desire to have it clearly stated in the record here that we object to all evidence in regard to a 25-foot dam, or the feasibility of such a dam, or to its area, or anything connected with it, on the ground that there is no issue in regard to that. That there is no power in the court in this case to allow such a dam, and there has been no notice given that such a dam was ever claimed until when present in court, and if the proper parties are not before the court, and the public is interested in this, the people in the canyon, and if they are not represented here the court
368 would not allow any dam that would flow that canyon without those parties being in court:

Mr. HENDERSON: If the court please——

Mr. HARKNESS: The court has ruled. I was only putting on record our objection.

Mr. HENDERSON: If the court has ruled I won't take any time. If the court has any doubt about it I want to be heard.

The COURT: I think not. I think for local reasons, in condemnation proceedings, that evidence of that kind should be admitted.

Mr. HENDERSON:

Q. How far back now would that set the water—but preliminary, to that however, I ask you if you have heard the testimony here have you, that gives the grade above Hanging rock?

A. Above Hanging rock?

Q. Yes?

A. I think I missed part of that, Judge.

Q. Well, you are, you know approximately what that grade is there?

A. Yes, I know the grade there.

Q. It is very nearly level?

A. Above Hanging rock?

Q. Above Hanging rock?

A. No.

Q. Well, the grade is very slight?

A. Not very heavy; it rises ten or twelve feet to the mile.

Q. Above Hanging rock?

A. Yes, taking in six miles.

Q. Oh, yes, well, state about what percentage of raise there is?

A. Well, that is two-tenths of one per cent.

Q. Yes, somewhere in the neighborhood of two-tenths of one per cent.?

A. Yes.

Q. How far would that set the water back from the 25-foot level?

A. Would set it back pretty close to 8,800 feet.

Q. Yes, 8,800 feet, would that flow the land that is in controversy here, that part of the Ferguson land that is included in this railroad survey?

A. It would.

Q. Yes, it would cover and flow that land?

A. Yes sir.

369 Q. Now state whether the body of water that would be raised by a twenty-five-foot dam put in there would be a narrow or a wide body of water?

A. It would be very narrow.

Q. Yes, it would be a narrow body of water up the stream?

A. Yes sir.

Q. Now, Mr. Searle, you have been asked by counsel on the other side to make some figures upon a- 85-foot dam, as to pressure of the water, etc., and at the same time that you do that I want you to make the same figures on a twenty-five-foot dam, if you please, and have that with you at that time.

A. All right

Recross-examination by Mr. HARKNESS:

Q. Mr. Searle, I understand the difference of grade, or in the water level I should say, instead of grade, between Middle rock and Hanging rock is two and three-tenths feet?

A. It was on the day that I took it.

Q. Well, that is the 950 feet?

A. Yes sir.

Q. What is the difference down to where your diverting dam is?

A. It is some fourteen or fifteen hundred feet. I can't give that exactly, Judge.

Q. Can you approximate it?

A. I think it is somewhere between three and four feet.

Q. Well, the water falls more rapidly from the Middle rock down to your diverting dam than it does immediately above?

A. Oh, yes.

Q. So that the increase of grade would be more in proportion to distance?

A. Yes, the water falls nearly one per cent. there for quite a little distance.

Q. Now in speaking of a twenty-five-foot dam, where do you mean to take the 25-foot dam, you have been examined as to a 25-foot dam; where is it to be?

370 Mr. HENDERSON: Just a moment; to that his answer to that question was specific, as to location; it was at either Hanging rock or Middle rock.

Mr. HARKNESS: But here is a difference of three or four feet in there; I want to see where the 25 feet is to be taken in your estimate; my understanding is that it is 25 feet at Hanging rock.

Q. At Hanging rock?
A. Yes sir.
Q. Do you mean 25 feet above the high or low water line?
A. Twenty-five above high water.
Q. Above high water at Hanging rock?
A. Yes sir.
Q. How much would that be above high water at your diverting dam?
A. Oh, that would be about thirty feet or a little over.
Q. What is the difference between the high and low water in——
A. In Provo river there——
Q. Yes?
A. It varies from four to six feet according to the season; '96 was a very high water.
Q. Then how high would you estimate a dam to be from the bed of the river to make it 25 feet above high water at Hanging rock?
A. About 31 feet, the average bed of the river. I think there is a hole in there.
Q. And three or four feet more at your diverting dam?
A. Yes, if such a thing were possible. I never understood that it was contemplated at the diverting dam.
Q. To what depth would that flow the Ferguson land?
A. Various depths; it would be fourteen feet deep at the old Ferguson house, or toll-gate possession; I think that most of these gentlemen know that house with relation to the rest of the land.
Q. It would be fourteen feet deep there?
A. Yes, that point is eleven feet above the water at Hanging rock.
Q. Do you know how far from the southwesterly line of this land that house is?
371 A. I do not know, Judge, I never measured.
Q. Well, never mind, we have maps here.
A. Yes your maps show.

Mr. HENDERSON: I have got a question I want to ask him about that very thing, Judge; while you are consulting I will do that.
Mr. HARKNESS: Go right along.

Mr. HENDERSON:

Q. Mr. Searle, you say it would be fourteen feet at the Ferguson house, and you say it is now eleven feet above?
A. I said Ferguson's house was eleven feet above the water at Hanging rock at the day that I took the elevation.
Q. Oh, above Hanging rock?
A. Above the water at Hanging rock.
Q. And that it would make it fourteen feet; how far is Ferguson's house above Hanging rock—oh, about how far?
A. About, oh, twelve or thirteen hundred feet I think; maybe it is twenty-two or three.
Q. Well, I was going to ask you in that figuring — you would

have to take out the descent from Ferguson's house down to Hanging rock?

A. Sir.

Q. In that figuring shouldn't you take from any estimates the depth that it would flow this land or flow the land of the Ferguson house, shouldn't you take from that estimate the descent from Ferguson's house down to Hanging rock?

A. That is just what I have done. I say the Ferguson house is eleven feet above the water at Hanging rock, and I took that eleven from 25, it leaves me fourteen feet of water there.

Q. I see, that would make it twenty-five feet at the dam?

A. It is eighteen hundred feet up to Ferguson's house from Hanging rock.

Mr. HARKNESS:

Q. Was it high or low water when you took the elevation of Ferguson's house above the Hanging Rock water?

372 A. Oh, about medium.

Q. Then in high water Ferguson's house would be less than eleven feet above the water at Hanging rock?

A. Yes sir.

Q. And twenty-five feet above high-water mark would flow more than fourteen feet at his house?

A. Yes, in 1896 the ordinary high water of the river covered the road in front of his house.

Q. About how many feet more than fourteen would a dam twenty-five feet above high-water mark at Hanging rock flow at his house?

A. About four feet.

Q. Making it about eighteen feet in high water that such a dam would flow his house, flow at his house?

A. Yes.

Q. Can you tell the area which a dam twenty-five feet above high water at Hanging rock would flow the area in acres?

A. In acres.

Q. Yes?

A. I can approximately, but only approximately.

Q. Well, give it as closely as you can?

A. 60 acres.

Q. Sixty acres?

A. Sixty to sixty-five.

Q. And how far above Hanging rock would that take it, the water?

A. 8,800 feet.

Q. 8,800 feet; how far would that be above the Ferguson land?

A. Above, I don't know Judge, the boundaries of the Ferguson claim; it would be 7,000 feet above his house.

Q. About 7,000 feet above his house?

A. Yes; now I don't know the boundaries of his land.

Q. Why, North fork comes within that distance, doesn't it?

A. It does not.

Q. South fork?

A. South fork comes in in that distance.

Q. It would flow the water back into the South fork?

A. Very slightly.

Q. What is the fall of the South fork as it approaches the river?

A. Nearly ten feet to the hundred.

373 Q. How?

A. The first two or three hundred feet is nearly ten feet to the hundred; it is flatter after you get up a sharp pitch there is there.

Q. Well, wouldn't the 25-foot dam you have spoken of flow up to that level onto that flat?

A. Yes, flow onto a little bit, not much.

Q. If you raise a railroad to go above that 25-foot dam, you would have to go over the South fork there?

A. Yes, but your railroad is already pretty nearly as high as the grade line would be, as the water line would be there.

Q. Well, wouldn't a twenty-five-foot dam increase the width of the water at South fork a good deal?

A. Not materially; I think that little bench that is back there more than 25 feet from the river water is more than 25 feet above the water level at Hanging rock.

Q. Have you ever made any survey for a twenty-five-foot dam?

A. No sir.

Q. This is only an estimate?

A. This estimate of the distance up the river is accurate, taken from my previous notes; they are continuous up the river.

Q. Did you ever hear of any 25-foot dam until in court here?

A. Until I came in court?

Q. Yes, or about this time?

Mr. HENDERSON: I object to that if the court please; I don't see what this has to do with it, what he has heard.

Mr. HARKNESS: Well, he says he has never made any survey, I withdraw it.

Mr. HENDERSON, on redirect examination:

Q. One further question. You made a diagram in reply to Mr. Wedgwood's questions up there in relation to an 85-foot dam, putting the filling in at the bottom on the upper side of the dam; now in building a dam of less height, say 25 feet, let me suppose now this question: Suppose that a 25-foot dam was built in

374 that river there, which was to be used for power purposes, and this height had been raised for the purpose of equalizing the flow into the pipe that took it out, and so as to give even temperature, and to get clear water, and for that purpose the pipe was put into the face of the dam high enough above the bed of the stream so as to get clear water and deep enough below the surface of the dam so as to get it free from ice in the winter. Now, what under such circumstances as that, how would the bottom of that dam be built on the upper side; state whether under such circumstances it would be filled in on the upper side?

A. It would not.

Q. No, it wouldn't be filled in?

A. No, not any higher than the opening that you propose.

Q. Well, that is what I mean, but up to a little distance below that opening it would be filled?

A. Yes, sir.

Q. So that the depth of water would be the depth of actual water would be only above that sediment that was put in there to protect the dam and make it solid?

A. Yes, sir; that is right.

Mr. HARKNESS:

Q. Mr. Searle, if the object of putting a pipe above the water is to get clear water, how would you get it by filling in up to the pipe?

Mr. HENDERSON: He didn't say that.

A. I said it would not be filled in above the bottom of the pipe.

Mr. HARKNESS:

Q. What is it?

A. I said it would not be filled in above the bottom of the pipe.

Q. No, certainly not; you would fill it up to near the pipe is that right?

A. Probably.

Q. How would you get any clearer water if you put your pipe there than you would if you put it nearer the present level.

A. The object is not to do away with the sediment in the stream but to do away with the ice which is on the surface of the water, and which at times last winter came down in small par-
375 ticles of ice so thick in the water that it would clog in the flume.

Q. Wouldn't the suction draw it right down?

A. No sir.

Q. Well, how do you get clear of that float ice I believe you call it, by raising your pipe in the bottom instead of lowering it to the bottom?

A. How was that?

Q. How do you get clear of the surface ice, mush ice, by raising your pipe up in the bottom?

A. That wasn't the, I didn't say that, we would do so.

Q. Well, Judge Henderson's hypothetical question was on that basis?

A. That raised a certain amount of sediment which I supposed the judge thought we might possibly want to put the pipe up some place in the dam in order to avoid it?

Q. And that you didn't pay much attention to. All right.

Mr. HENDERSON: You wouldn't lay that pipe right in the bed of the stream?

A. No sir.

Q. It would be raised a little in order to get clear water?

A. Yes, sir; it would be raised a little naturally.

L. L. NUNN, called and sworn for the defense.

Examined by Mr. HENDERSON:

Q. Mr. Nunn, where do you reside?
A. At Telluride, Colorado.
Q. What is your business?
A. It has been for some time past in charge of the electrical and mining interests of the Telluride Power Transmission Company.
Q. You know that company, do you?
A. I know it very well.
Q. What business is that company engaged in?
A. Electrical——

Mr. HARKNESS: One moment; I think there is better proof; we object to the proof of what it is engaged in unless its articles of incorporation are shown.

376 The COURT: Unless it should be followed up?

Mr. HENDERSON: Unless it should be followed up; if the court please, this doesn't go to that.

The COURT: It is preliminary I suppose.

Argued to the court.

The COURT: Answer the question.

Mr. HENDERSON:

Q. What business are they engaged in?
A. In electrical transmission; also in mining.
Q. Have you had any connection with that company with their operations here in Provo canyon?
A. Yes, sir; I have been in charge of the industry here from its beginning.
Q. When Mr. Nunn was your attention first directed to investigating the water privileges for the purpose of generating and transmitting power to Utah?
A. In 1893.
Q. 1894, and by whom?
A. Mr. T. A. Davis, a resident of Salt Lake City at that time.
Q. Was that followed by any, by your making any investigation?
A. Yes sir.
Q. Just state when you began to make any investigation?
A. In '93, I commissioned Mr. Davis to look into the water powers of Utah, and he reported in a brief manner on all of the different streams.

Mr. HARKNESS: We object to that.

The COURT: Come directly to the matter here in issue.

Mr. HARKNESS: We object to what he reported to Mr. Davis, or to what Mr. Davis reported to him as hearsay.

Mr. HENDERSON: Yes, I don't care for the detail of that, if the court please, and I say now, that counsel may understand the purpose of this testimony, that I am getting this preliminary matter for the purpose of bearing upon the good faith of the enterprise that is

the purpose of it, to show that it was undertaken in the ordi-
376½ nary way in which such matters are, with due investigation and such expense and trouble connected with it as show absolute good faith. That has been made a question in this case and we think we have a right to show it.

Mr. HARKNESS: The question of bad faith comes wholly from the other side. We haven't raised a question about it. We have had all kinds of insinuations thrown out against it in that respect; but a man's good faith is utterly without purpose except it is illustrated by acts. If an act is done and its intention is ambiguous, the intention with which it was done might describe it.

Mr. HENDERSON: Certainly but we expect to show succeeding acts of appropriation which will show that very point.

Mr. HARKNESS: Well, the other ought to be done first.

The COURT: Proceed to that as rapidly as you can. I don't think that latter part is proper.

Mr. HENDERSON:

Q. Now go on Mr. Nunn and state what you did.

Mr. HARKNESS: Does the court allow him to state what Mr. Davis reported.

The COURT: No sir.

Mr. HENDERSON:

Q. I don't ask him that. I ask him to go on and state what he did, but the fact that he did report is left. Now go on and state what you did in pursuance of that?

A. The attention which I gave the enterprise in 1893 was late in the fall, and ran into winter; consequently after receiving the report, I did nothing further until the following summer, when I came in person and with the attorneys of the company looked into the laws governing the water powers of the State, and visited the canyon with the mayor of the city of Provo, Mr. Holbrook; that I think must have been in August or September.

377 Q. Well, did you do anything else that year?

A. I instructed Mr. Holbrook, made an arrangement with him to supervise such work as was necessary to ascertain the amount of power that could be obtained from the river. I was disappointed at the size of it and so expressed myself. A day or two later I sent Mr. Matthis, a surveyor from Salt Lake City, to report to Mr. Holbrook, and Mr. Matthis run lines and made other investigations.

Mr. HARKNESS: Wait. Do you know he ran the lines?

Mr. HENDERSON: Well, no matter; I withdraw it if he did.

Q. Did Mr. Matthis report to you what he did?

A. Mr. Matthis reported to me, also sent me a copy of his work.

Q. I will ask you if this is the report and the map that he forwarded to you in pursuance of that instruction?

A. I have not seen this for a year, but I can tell in a few minutes; yes, this is the map.

Q. Now, just look at the report that you have, and see if that is the report that he made?

A. This is the report, yes sir.

Q. He did report in writing then?

A. He reported, sent me this report together with a diagram of the stream.

Mr. HENDERSON: If the court please, I ask as a part of the examination to introduce this.

Mr. HARKNESS: We object to that, wholly unverified, and hearsay of what Mr. Matthis has said and done.

Mr. HENDERSON: Well, it isn't hearsay; it *is was* came to his knowledge, to Mr. Nunn's knowledge. I offer it now bearing upon the question of his proceeding here in good faith with the enterprise. The court is familiar with what this is. (Argued.)

A. That is Mr. Matthis' signature to it; I can swear to that.

The COURT: For the time being at least I will let it be admitted.

378 Mr. HARKNESS: I don't understand the court.

The COURT: I think for the time being at least, or for future action I will let it be admitted.

Mr. HARKNESS: We take an exception.

Mr. HENDERSON: I will read it right now, because he isn't permitted to tell what it is.

Mr. HARKNESS: And before that is read I make the objection that that is a paper which is unverified, purported to be from Mr. Matthis, and we know nothing about it.

The COURT: Properly, if at all, it can only apply to the intent of Mr. Nunn.

Mr. HENDERSON: Yes, that is right; that is what I offer it for. It is in evidence, I won't stop to read it now. I have a lot of documents to be read later on.

Report marked "Def'ts' Ex. 3, D. H. R. Ferguson case."

Map marked "Def'ts' Ex. 4, D. H. R. Ferguson case."

Q. Go on and state what further directions you gave to anybody and what you did.

Mr. HARKNESS: Was the map offered Judge?

Mr. HENDERSON: Yes.

Mr. HARKNESS: Our exception goes to both of them.

A. In 1894 that I was speaking of after spending a few days in Utah, and returning to Colorado I sent the chief engineer of the company and the hydraulic engineer to look over the whole proposition, and to further direct work; my directions——

Mr. HENDERSON:

Q. Mr. Nunn, you stated before that something about being disappointed in the size of the river; state whether you gave any directions in this connection, the looking after reservoir sites?

A. I did, I instructed the engineers that the stream had disap-

pointed me in size, and if they could not adopt a plan for developing at least ten-thousand-horse power, to abandon it; that there were several other propositions of large size that we would
379 prefer to take up; and with that in view Mr. Matthis was instructed to look at the headwaters of the different streams, South fork and Cascade, where it had been reported to me that reservoirs could be made.

Mr. HARKNESS: One moment.

The COURT: Never mind.

Mr. HENDERSON: How was that.

The COURT: Objection was raised as to what had been reported to him.

Mr. HENDERSON: Well, if the court please.

Mr. HARKNESS: He said that something had been reported to him.

Mr. HENDERSON: Well, I ask him about what was reported, but that has not come to that, and I will ask that question now, if a report was made to you about that?

A. Yes sir.

Mr. HARKNESS: I object.

The COURT: In regard to those different streams leading in is he speaking now with regard to those?

Mr. HENDERSON: The streams above, yes, the streams in this vicinity.

The COURT: Answer the question.

A. After careful examination nothing could be found outside of the Provo canyon of the immediate waters in Charleston; and after the chief engineer and hydraulic engineer had remained here for some time they sent for me and I came on to receive their recommendations. They had not laid out a line, an absolute line at that time. The only survey that I saw marked on the ground was the survey which this map, from which this map was made, but they had examined the ground very carefully on a bench above.

Mr. HARKNESS:

Q. Well, how do you know that they had examined the ground very carefully, did you see them do it?

A. I saw the holes that were dug, and went with them when they called my attention to the quality of the soil of its
380 nature for holding water, and the feasibility of the use of a ditch for a waterway instead of wood; went all over that ground with them fully, and they called my attention to the fact that nature had fixed a place at which a canal could be built and at only one place, and that place was on a level——

Mr. HARKNESS: I object to that and move to strike it out, on the ground that it is only the hearsay of others.

Mr. HENDERSON:

Q. Well, state if you observed this yourself there?

A. I observed this as it was called to my attention by my engineers. The hills stand back from Provo canyon, the mountains

stand back for quite a long distance they are quite steep for a long distance down, and then there is a bench; that bench runs quite flat. We saw at that time—I saw the old survey that had been made several years before with a view of putting in as I understood a ditch for other purposes.

Mr. HARKNESS: Well, you are stating what you understood it was about that.

Mr. HENDERSON:

Q. Well, what you saw.

The COURT: What he saw and what he did.

A. Well, this bench was the natural feature of that country, and the only question that came to our mind was how to get the water up on that level. We hadn't at that time run the levels of the river, and didn't know exactly how far we would have to run up before we could tap the river to load into this particular point from which the water could be led down to the mouth of the canyon.

Q. Now when was this examination?

A. This was in '94, the fall of '94; at the same time it seemed evident from the——

Mr. HARKNESS: Well, that I object to, what seemed evident.

381 Mr. HENDERSON: Well, leave out the word seemed.

Mr. HARKNESS: The witness is simply giving us a lecture from his own mental conclusions.

The COURT: Leave out the word seemed.

Mr. HENDERSON: Leave out the word seemed and go on.

A. I simply wanted your honor to convey the impression that I supposed was wanted, as to why I adopted this plan.

The COURT: Yes sir; and your acts, and what you saw there, and what you did, I suppose it is proper.

A. Well I adopted that level as the level to be used in connection either with a dam——

Mr. HARKNESS: We object to that and move to strike it out "I adopted that level."

Mr. HENDERSON: Well, on what ground?

Mr. HARKNESS: What did he do?

A. I adopted this level.

Q. Where, how?

A. On that ground?

Q. In your mind?

Mr. HENDERSON: I will show further on where, what it was and locate it definitely.

Mr. HARKNESS: We think we ought to have the acts done.

The COURT: His acts there in regard to location, anything of that kind.

Mr. HENDERSON: Yes, that is what he is proceeding to tell, just as fast as he is permitted to.

A. I instructed the engineer then to lay out that line.

Q. Now, did you afterwards become acquainted with what has been called here the sixty-foot level?

A. That was practically the point, and the point where I instructed the——

Q. (Int.) That is what I wanted to call your attention to.

A. (Continuing:) Line to be laid out.

382 Q. At that time how many men did you have at work in the canyon in this work?

A. Only a few. I think probably Mr. Matthis had just his necessary surveying gang, which was two or three men cutting brush, and a couple of rodmen, and Mr. Cramer I believe had a couple of men digging these pit holes, only a few men at that time besides the engineers.

Q. Now, what were the pit holes, where were they?

A. One was, I think, a little above, going up the river, Thayer's house, and one was a considerable way down, nearly I should say nearly a mile.

Q. Yes, they were just below the point called the Hanging rock.

A. Oh; yes; they were below the point called Hanging rock.

Q. Well now, you have stated that you gave instructions to run out that level, and how long was you there at that time?

A. Only two or three days; possibly not more than two days.

Q. Did you visit the canyon, or visit Provo again that year?

A. I think not.

Q. State whether, when did you next come here?

A. The following spring.

Q. The following spring; before you came was any report made to you as to whether that level had been run out or not?

A. No sir; that level wasn't run that fall; this was quite late in the fall, and the work was stopped a few days after I left.

Q. Now, when you came back in the spring about what time was it that you came here?

A. In the spring of '95 I believe I came in April or May.

Q. Yes; did you visit the canyon at that time?

A. I did.

Q. Yes; now at that time did you have any men at work in there?

A. I came at that time with Mr. Cramer.

Q. Who is Mr. Cramer?

A. The hydraulic engineer; and left after one day's examination; and he set some men at work.

Q. Now when did you come back here again?

A. I think my next trip was in November 1895.

383 Q. In November, in the meantime had——was reports made to you as to how the work was progressing?

A. In a general way, through letters only.

Q. You did come back in November?

A. I came back in November, yes sir.

Q. And at that time did anybody accompany you?

A. Yes sir.

Q. Who?

—. I came back in October.

Q. In October?

A. I made three trips here, in October, November, and December; and the first trip was in October; now I feel quite sure that this wasn't September; it must have been October.

Q. Now was anybody with you, did anybody come with you?

A. On the first trip, the president of the Telluride Power Transmission Co., Mr. James Campbell, the attorney, Mr. Bailey, and the chief engineer P. M. Nunn.

Q. Now you have spoken of the hydraulic engineer; where was he?

A. He was in charge of the work in the canyon.

Q. He was in the canyon at that time?

A. He was in the canyon at that time.

Q. How did you go into the canyon at that time?

A. Crossed over from Park City and drove down through the entire length of the canyon to Provo.

Q. With these other three persons with you?

A. With these three other persons with me.

Q. Now at that time state what you observed, what you saw about the work that had been done in pursuance of your orders?

A. The lines had been run out in usual form of engineering, and stakes; several lines as trial lines for a preliminary waterway, and preliminary dam in accordance with my instructions, to get some way of getting the water out of the river and utilizing it for a small plant to build the large one with, as cheaply as possible; and the sixty-foot level had been partially, or completely, I don't
384 know, I think it was only partially surveyed.

Q. What part of it was surveyed?

A. The upper part of it I am quite sure, because I walked up on to that point.

Q. Yes?

A. And I did not at that time go down over the whole line.

Q. Did you and the other persons that were with you examine the canyon and the works at that time?

A. We did; we held considerable discussion there as to the best method of utilizing the power.

Q. Yes, that is what I was going to ask you; at that time did you determine about the character of your enterprise, and what it was to be, in a general way?

Mr. HARKNESS: I object to that.

The COURT: Read the question, Mr. Reporter.

A. We did.

The COURT: Wait.

A. Oh, excuse me.

The COURT: What is your objection, Judge?

Mr. HARKNESS: The determination is simply what he and some others may have concluded in their mind. There has been nothing what he did, but for what purpose we don't care.

Mr. HENDERSON: Well, that is what he did. I want to show

that at this time in October, 1895, the work and the necessary work to illustrate what the enterprise would be, and that himself, the general superintendent of the company and president of the company and attorney of the company and the hydraulic engineer, and electric engineer all met there, looked the ground over and determined then finally the enterprise that they were entering upon and what it was, and I went to finish this by showing what the character of that enterprise was at that time, and then follow by showing that they entered upon that from that time on, and was carrying it out by taking charge of the work and marking
385 it upon the ground and going ahead in the ordinary way of carrying on such an enterprise.

The COURT: The objection is overruled.

Mr. HARKNESS: Take an exception.

The COURT: Of course, Judge Henderson the acts are better evidence of these matters, the acts of the company.

Mr. HENDERSON: That is true, if the court please, but it is the same with this enterprise that it would be with anything else; you might put a gang of men in the canyon there and survey it over and nobody could tell whether it was for a railroad or a water ditch, unless somebody said so. But then the intention is known then you can tell whether the things they did are consistent with it.

Q. Now, go on, Mr. Nunn?

A. Just read the question.

Mr. HENDERSON: He answered that he did, and the record can be that you moved to strike it out, and that it was denied, so as to make the record right.

Q. Now state what that was, explain it to the court and jury, Mr. Nunn, in your own way.

Mr. HARKNESS: That I object to as simply the mental determination or action of these parties for which no acts have been shown to characterize it.

Mr. HENDERSON: I propose to follow it up.

The COURT: Subject to that it can be admitted.

Mr. HENDERSON: Of course if I should stop there it should go out.

Mr. HARKNESS: We simply desire to save an exception.

Mr. HENDERSON: Go, on; Mr. Nunn and explain in your own way.

The COURT: As briefly as you can.

Mr. HENDERSON:

Q. Yes.

A. The plan agreed upon there was to practically con-inue the work that had been done in Telluride, duplicate that plant,
386 and to put it up at that point, not a dam in the usual form, but as I explained here before, to raise the water to that level by filling up the bottom of the canyon, in the ordinary way of sluicing for placer mining.

Q. To what level, Mr. Nunn?

A. To the sixty-foot level, which was adopted at that time as the only practical level on which to construct a proper waterway. It was the purpose and the plans were so discussed, of hydraulicking the sides of the canyon down, which would be a very economical and cheap method, and make an absolutely indestructible dam in the canyon of rock and contact as it came down and mixed, compounded with the water. That would be done for a distance of in the neighborhood of a mile upon that, with the foundation running clear down to the bottom of the stream, would be the reservoir bottom, which would be about twenty-five feet in height; it was never at any time contemplated to store more than twenty-five feet of water back of the dam, but we required the sixty-foot elevation in the bottom of the canyon in order to get the water into the sixty-foot level; and I have not mentioned here, which I should do, the additional advantage of that sixty feet higher, it is easily seen by the additional head which would give—it would give just about twenty-five per cent. more head of pressure, twenty-five per cent. more power to the same amount of water and also give a great deal better opportunity for the construction of the waterway.

Q. Now Mr. Nunn, explain the plan for construction, and the manner for carrying out that scheme, and what was—and how power was to be furnished and what was to be done.

Mr. HARKNESS: I desire to repeat my objection to that upon the ground that the plan of construction which they determined on is wholly immaterial, and disconnected with any act or fact going to forward the construction.

The COURT: It will be admitted, Judge as the other was, Judge Harkness, on the theory that it will be supplemented by acts
387 and consistent with what is said was their purpose.

Mr. HARKNESS: Simply desire to reserve the exception.

Mr. HENDERSON:

Q. Go on and explain about that fully Mr. Nunn, as to the construction of the dam?

A. The dam of twenty-five feet high is usually constructed of rock-filled crib. This was proposed by the engineer, and I might say that I was inclined to prefer that plan as being absolutely safe in every particular, and I thought more economical, but the plan which was discussed and always adhered to by the engineers was that of a masonry dam from the bottom——

Mr. HARKNESS: One moment. I move to strike all that out as simply what he thought, and not giving the determination or plan which they agreed upon.

The COURT: I think that is correct.

Mr. HENDERSON:

Q. State whether that was——

Mr. HARKNESS: Well, wait a moment.

Mr. HENDERSON: I will withdraw that.

The COURT: The objection is, or motion is to strike out what led to that, such statement that he made. It should go to the adoption or to the conclusion, positive conclusion or adoption of the company and what they did.

Mr. HENDERSON:

Q. Yes, now Mr. Nunn, state whether that was substantially adopted as the plan there?

A. The plan adopted was to begin a long distance down the stream and put in a solid masonry low retaining toe, so as to get a, just a solid reef across the bottom of the stream, so that that would stop the rocks as they rolled down; that would become perfectly compact and solid, as shown by all placer washings in California, as well as other States; becomes absolutely indestructible. A distance of perhaps two or three hundred feet above would be another one placed higher up, and in that way up, each one being a matter of
388 five to eight feet higher. There would be from eight to ten of these in the course of half or three-quarters of a mile.

Mr. HARKNESS: I don't understand where that was to be?

A. That was to be below the actual bottom of the reservoir, below the lower end of the reservoir.

Mr. HENDERSON:

Q. Yes, but what Judge Harkness called your attention to is at what point on the stream, what particular point of the stream would you commence erecting these benches?

A. Probably three-quarters of a mile below Hanging rock.

Q. And extending them up the stream in the way you have explained?

A. Yes, sir the exact location of these of course were not fixed that day; that would be controlled by more accurate investigation, as to the condition of the rocks of the stream, the bed rock and so on.

Q. Now, Mr. Nunn, as to the practical operations of carrying it out, and furnishing the power for the sluicing, for the doing of the work, what was the idea of that?

A. That had to be provided for by pumping from the river.

Q. Well, by what power would your pump run?

A. From the temporary electric station that we were endeavoring to put up as quickly as possible which we were arranging to take the water from the river at a lower elevation. We would then construct our main work which we were pushing as rapidly as possible in the surveys and engineering, we wished to put up a small station at as little expense as possible to provide the power for the sluicing of the material down the canyon; also for handling of rock in the masonry beds; also for the use of power shovels in the construction of the waterway or canal.

Q. Now, was the site, the place of that located and fixed, as to where you was to take that out of the river for this temporary work?

A. The temporary one?

389 Q. Yes?

A. No, not at that time it was not, because the engineers

were running several levels to determine which were the most economical site.

Q. Yes. Now you say you was there three times that fall, that was the first time?

A. That was the first time; the second time was about the middle of November.

Q. And who came with you that time?

A. A young man, cashier of the First National Bank of Telluride; he had nothing to do with the business.

Q. You were up there and examined the work at that time?

A. I was.

Q. And what was being done then in the canyon?

A. These levels were being completed, but I was not satisfied with the exact position that had been run out, and instructed another level to be run practically where the present flume is.

Q. That was for the temporary works?

A. That was for the temporary works.

Q. What was being done with the engineering work on the main dam or proposition?

A. That was—the survey was being run, if I remember rightly, from the lower part of the canyon down to the mouth. I think that was nearly completed when I was there in the middle of November.

Q. And did you at that time make any examination, personally, of the sixty-foot level?

A. I was up there. That proposition had been old to me at that time, but I went up and walked over the line of the survey with Mr. Brown, simply as a matter of interest to him.

Q. State what its condition was, whether it was surveyed out and stakes were struck along in at that time.

A. It was. The brush was cut, as required by surveyors for doing their work, and the stakes were all set at the upper end. The
390 upper end was all provided with I believe what they call plugs, two-inch square stakes put in for permanent work.

Q. You say that the brush was cut; was there some—there is some brush along the side there, is there?

A. Oh, there is a great deal; that hillside is covered.

Q. State whether the brush there being cut there and those plugs set was such an indication that anybody going into the canyon and exploring there and looking for locations, or to observe any indications of locations, or going along there would have been attracted to that indication?

A. Yes sir.

Mr. HARKNESS: That is objected to as leading.

The COURT: I think he should describe what was done; the evidences there of that.

Mr. HARKNESS: It is leading; he can't tell what would attract the attention of others.

The COURT: Whether he saw this or not.

Mr. HENDERSON: But I want to show by this witness the connect-

ive fact that it was of such a character that persons going through there for exploration purposes would naturally be attracted to it, led to see that a permanent line had been run there; which is the same practically in the location of a mine, the party making the discovery could testify as to whether there was such indications as to lead him to believe that a location had been made there.

Argued to the court.

The COURT: I think it is a conclusion Judge.

Mr. HENDERSON: Well, just a moment; I will withdraw that question for the time being.

Q. You have stated now that you went up there and went over the upper end, where it was surveyed?

A. Yes sir.

Q. That you saw the plugs?

A. Yes sir.

Q. And you saw the path that was made through there from post to post?

A. I did.

391 Q. You say that was plain to be seen?

A. It was.

Q. Now, how long was you in the canyon at that time—oh yes, I will ask you the further question, what would they have indicated, what did they and what would they have indicated to anybody going over the ground?

Mr. HARKNESS: I object to that. Just a moment.

The COURT: What is the question, Judge.

Mr. HARKNESS: It is a matter of conclusion what they would indicate to somebody else He said they were plainly to be seen.

The COURT: I think that is sufficient. The objection sustained

Mr. HENDERSON: Give us an exception.

Q. How long was you up in the canyon that time?

A. I don't remember.

Q. Was you up more than one day?

A. At that time I remember I stayed up there over night.

Q. Oh, you stayed over night, where did you stay?

A. I stayed at the camp.

Q. Yes, and did you stay more than two days that time?

A. I don't remember.

Q. Don't recollect?

A. No.

Q. What were you doing during the days that you did stay?

A. Examining, looking over the entire proposition, and studying it as one naturally will so important a matter.

Q. When was you there again in '94?

A. In December.

Q. In '95, I mean.

A. In December.

Q. And at that time did anybody come with you, from the company, I mean?

A. Yes, I was there in '95, with one of our engineers; Mr. Convers, and also the chief engineer, P. M. Nunn.

Q. How long was you up there at that time?

A. I believe I was there two days.

Q. What did you observe at that time with reference to
392 how tthe work had progressed from when you were there before?

A. Well, it was very bad weather, and the work was practically completed, the upper line had been entirely surveyed; the lower part of it I think was flagged, I think, with stakes four or five feet high, or from three to five feet high, and a cloth on them.

Q. What line do you mean?

A. The sixty-foot, what we have called here the Suhr level: the upper part had plugs in; and I did not go over the full line. At that time I determined on the present line or level as a temporary work.

Q. Yes, and the sixty-foot level had been extended down the canyon?

A. The sixty-foot level had been extended down the canyon Mr. Suhr was on the work, and just what time that was finished I can't say.

Q. Well do you know how far down the canyon it had extended?

A. It had extended down to the mouth of the canyon.

Q. Yes, it was clear down?

A. Clear down.

Q. Now how was the lower part of it marked, this that was not marked with these flags?

Mr. HARKNESS: He didn't go over it.

Mr. HENDERSON: I understood him to say he saw it.

Mr. HARKNESS: I understood the witness to say he didn't go over that. I may be mistaken.

A. I did not go over the entire line. Along for a mile or two was marked as I mentioned before with flags, pieces of cloth put on stakes from three to five feet high.

Mr. HENDERSON:

Q. How far down did you observe these at that time?

A. I should think about half way down the canyon: about two miles and a half.

Q. Now, Mr. Nunn, during these three times that you were there during 1895, just state about as nearly as you can approximately, anyway, the number of men that was employed in there by you?

393 A. I should think there was from 15 to 25; that is that it varied from 15 to 25 that fall during the times that I was there.

Q. During the times that you were there in the canyon, state whether they were maintaining a regular camp there of workmen?

A. They were.

Q. Now that was the line that you saw in 1895?

A. That was the line I saw in 1895, that was I think on the 23rd of December when I left. I was there twice in December, simply going up to Salt Lake and returning again, going up the canyon each time I passed through Provo.

Q. Now, when did you come here in 1896?

A. I will have to figure a little. I brought Mr. Cramer from Denver, leaving Denver on the 14th or 15th of February, '96, and sent him here from Salt Lake. I did not come until, I think it was the 27th of February. I went to Butte City.

Q. That was the first time you had been here in 1896?

A. The first time that I came here in '96, yes sir.

Q. And that time did you go up the canyon?

A. No, sir; I did not go up the canyon in February.

Q. Did you do anything here in Provo towards promoting the work?

A. Why, I should say so, I paid bills.

Q. Well, did you enter into any contracts?

A. I negotiated with Mr. Sterling for the flume of the present grade; the arrangements were completed, but owing to the necessity of going to Telluride early, I think the contract was not signed until March when I returned.

Q. Did you at that time complete substantially the arrangements for that?

A. Yes sir.

Q. That was putting in the flume for the temporary works?

A. The present flume, yes sir.

394 Q. The present flume, and you then left; who was there, do you know if there was anybody there?

A. Mr. Cramer was there in charge of the work.

Q. Mr. Cramer was in charge of the work?

A. From the 16th of February all that year.

Q. Now, when did you come back here Mr. Nunn again?

A. I came back in March.

Q. In March?

A. Yes sir.

Q. Could you state anything about the time in March?

A. I think it was about the middle of March.

Q. And did you go up the canyon at that time?

A. Yes sir.

Q. How long was you here in Provo at that time?

A. I think I was here about a week, not all the time in Provo; I went up to Salt Lake once or twice.

Q. How many times and how much was you up the canyon at that time?

A. A number of times, I don't remember just how many times, but the work was going on very extensively there then grading out for the flume, I changed the position of the diverting dam from the point near Middle rock to the present point. I did that because it was several hundred feet shorter, would be several hundred feet

shorter of flume, and by raising the dam only two or three feet higher it would serve the same purpose.

Q. Yes?

A. (Cont.:) At the same level or waterway.

Q. That would be simply diverting it into the same ditch?

A. Diverting it into the same waterway and by a little higher dam, several hundred feet lower down.

Q. Now state if anything was being done at that time with the upper level, the sixty-foot level?

A. Yes sir.

Q. What?

A. No, I believe not, at that time; I believe that nothing was being done with that; we were pushing the lower work as
395 rapidly as possible, but that was early in the season and I think that nothing was done on that in March, or until the latter part of March.

Q. Well, did—how many men was there up there at that time?

A. Quite a force of men.

Q. Well, approximately, state how many.

A. I should think there were 25.

Q. State whether a regular camp was maintained there at that time.

A. Yes sir.

Q. At what point was it maintained?

A. I think the camp was in Thayer's flat.

Q. At Thayer's flat?

A. I bel-eve so.

Q. And was it a camp where the men ate and slept?

A. Yes sir.

Q. How near was it to the wagon road that goes up the canyon?

A. It was just across the river.

Q. Was it in sight of the wagon road?

A. Oh yes, it would be impossible for any one to go along in the daytime without seeing it.

Q. How many engineers were at work there at that time?

A. I think Mr. Searle, had just gone up and commenced——

Q. And Mr. Cramer?

A. Mr. Cramer had been there from the 16th of February.

Q. Yes, well, he was there at that time?

A. He was there, yes sir.

Q. Now, and didn't Mr. Sterling, had he commenced there yet?

A. Mr. Sterling had been backwards and forwards a number of times, but was not permanently located there until the latter part of March, I believe

Q. Well, this was about what time in March, that we are talking about now?

A. From the middle of March, or from the 10th of March, I will say from the 10th of March to the last end of March.

396 Q. Well, during that time he did get up there, did he?

A. He got up there several times before he came up there to

stay. Went up there with me and discussed the foundations for the flume. The contract which I gave him to construct the flume did not include the grading nor the foundation, consequently that was done, and I required that it should be done in accordance with his wishes, so that there would be no trouble in constructing the flume.

Q. When did you finally enter into that contract with Mr. Sterling?

A. About the 20th of March.

Q. Was it in writing?

A. Yes sir.

Q. Have you got it?

A. I haven't it in my pocket. I think it is in the office.

Q. I wish you would bring that in after lunch, Mr. Nunn. And how soon after that was it before he commenced work there?

A. He commenced work immediately; in fact had been doing some work before, and he moved a force of men in there, or he brought them up, well, the men were all under the same—in the same camp.

Mr. WEDGWOOD:

Q. When do I understand Mr. Sterling went to work there?

Mr. HENDERSON: He said he entered into the contract about the 20th of March.

Mr. WEDGWOOD: I didn't understand the date.

Mr. HENDERSON:

Q. When was it that Sterling went up there and commenced in pursuance of his contract?

A. His contract required that his work should be done within a certain length of time; he did not commence that immediately, but in the meantime he worked for me as engineer.

Q. Well, that is what I want; now, when did he commence that work as engineer.

A. He was at work there from about the 10th.

Q. Well, then, you had Mr. Searles, and Mr. Cramer and Mr. Sterling there as engineers?

A. Yes, sir.

397 Q. From March?

A. Mr. Sterling wasn't there all the time, and I am not sure about the time Mr. Searle went up; because he was employed by Mr. Cramer and not by myself.

Q. Well, some portions of March they were all three there?

A. Yes; I think so; I am not positive whether I saw Mr. Searle there in March, but I think so. I paid very little attention to that part of it, because he wasn't under my direction.

Q. Now, when were you there again, Mr. Nunn?

Mr. WEDGWOOD: He hasn't answered that question, and I move to strike it out. You asked him when Mr. Sterling commenced to work under his contract; and I move to strike it out.

Mr. HENDERSON:

Q. Well now, about when did he commence under his contract?

A. I do not know that was left to Mr. Sterling and left for him to commence whenever he saw fit.

Q. Now, when was you back here in Provo again after that?

A. I don't remember. The work was being pushed, so that it was having constant attention, and I suppose I was here several times during the next few months I was here. I know I went up several times, but the trips being nearer together, and not being so fixed on my mind, I can't say just what time it was.

Q. Well now, at the next time that you come I will ask you if you observed anything about the upper level, about what work was being done on that, the sixty-foot level?

A. It was being graded from the Hanging rock down.

Q. On the sixty-foot level?

A. On the sixty-foot level. There was, there is a distance of several hundred feet where the side hill is very abrupt, and it would be practically impossible to construct a canal, and that would have to be provided with a flume, either wooden or iron. I instructed that the grade be prepared so that the flume could be constructed at the same time the other was, and everything made in readiness for the canal which would begin a few hundred feet below.

398 Q. Yes; when did you give that instruction?

A. I think that was in March.

Q. Yes, and when did you first observe that there was work being done on that, the actual grading of that?

A. I think that was, as I said a moment ago, I think they were not grading in March. I think that that was being done in March.

Q. You think that was being done in March?

A. There is some data from which I could tell that.

Q. How far were they below Hanging rock when that grading was being done?

A. The grading was being done all along from Hanging rock to I think about a half a mile down.

Q. That was grading out a place for a waterway?

A. Yes sir.

Q. That you observed in March when you were there?

A. I did.

Q. And when did you leave here in March?

A. I think it must have been about the 25th of March.

Q. But you can't tell just when it was that you came back here the last time?

A. I don't remember that.

Q. Now Mr. Nunn, when did you first learn, or have any knowledge of any surveyors being at work, or anybody being at work running, or doing anything towards any other surveying in the canyon, or towards the canyon?

A. I think that was in May, that Mr. Cramer wrote me that the surveyors were, railroad surveyors were in the valley approaching the mouth of the canyon.

Q. And that was the first you knew of it?

A. That was the first I knew of it.

Q. Did you come out here soon after that?

A. I must have been here soon after that. I didn't come out on that account. I paid no special attention to it; I did not apprehend that there would be any conflict.

399 Q. Now, to go back a little, Mr. Nunn, I want to ask you about that visit in 1895, when you and the other three officers of the company were here, and you determined upon the definite location, and determined the character of the enterprise, and how it was to be carried out? State if anything was done after that towards procuring the appliances for that, and if so, how soon after that?

A. The electrical apparatus for the power needed to carry on the work was contracted for the following January.

Mr. WEDGWOOD: January, '96.

Mr. HENDERSON:

Q. January '96, yes, that is right, the following January. During the summer now, 1896, during May, you were here occasionally, I think you have stated, and was any instruction given by you or anything done, and if so state what, both the instructions and what you observed as having been done, or being done in relation to running out the line on the 85-foot or the top of the 25-foot dam on top of the 60-foot level, running out a level on that around the canyon.

A. I had instructed Mr. Cramer to run a line around the reservoir site on the level with the canal, and also one at the top for the purpose of measuring the contents of the reservoir. Of course the water below the level of the waterway could not be used for reservoir purposes, and I wanted to find out the distance, so I wanted him to measure the bottom as well as the top of the reservoir. Mr. Cramer commenced running the sixty-foot level, which was on the level with the waterway, and I instructed him to change and run the upper level first, which was at the top of the reservoir.

Q. Well now, when you speak of the bottom of the reservoir if I understand you correctly, you mean the sixty-foot level?

A. I mean the sixty-foot level.

Q. Yes.

A. If the water, if the bed of the river at that particular
400 place was so raised that the water would flow into the sixty-foot level we would not use any water back of that fill, and that would be the bottom of the reservoir although not the bottom of the stream.

Q. Yes.

A. And therefore, I wanted the profile, I wanted the map of the bottom of the reservoir, and the map of the top of the reservoir, and the calculations as to how much the reservoir would hold, how much available water it would hold.

Q. Now, you have stated, Mr. Nunn, that when you learned that there were surveyors in the valley coming towards the mouth of

the canyon, that you did not apprehend that there would be any conflict; when did you first learn that there was conflict, or that it was being surveyed in a way that there must necessarily be a conflict between your works and theirs?

A. Why, I did not—I think that was the first time that I considered it a matter of any importance was when there was a little dispute over the ground by Hanging rock, I think that must have been some time in August; I am not sure of that date, but I understood that preliminary lines dodn't mean anything; they might be running——

Mr. HARKNESS: We will object to what you understood about preliminary lines.

Mr. HENDERSON:

Q. Well, when did you first understand they were surveying it in a way that there would be a conflict?

A. It must have been July or August.

Q. And that was the first?

A. And that was the first, that they were surveying before that time in the cañon.

Q. Yes.

A. Perhaps I might explain why I did not consider that there would be any conflict.

Q. Well, explain it.

Mr. HARKNESS: No, I object to it, any explanation as to what he considered.

The COURT: Read the question.

401 Mr. HENDERSON: I will withdraw the question. He has said that he didn't, I will ask you why?

Mr. HARKNESS: That I object to.

The COURT: I think that is hardly proper, Judge: objection sustained.

Mr. HENDERSON: Give us an exception. Now if the court please, I have got a few questions I want to ask him on another subject, and I think that I will be through with him in a few minutes.

The COURT: It is about the hour for recess now.

Recess until 2 o'clock p. m.

Resuming session.

L. L. NUNN, recalled for defense:

Examined by Mr. HENDERSON:

Q. Mr. Nunn, during the noon hour have you got that contract that you made with Mr. Sterling?

A. Yes sir.

Q. Is that it?

A. It is.

Q. Yes, what is its date?

A. March the 25th.

Q. 1896?

A. 1896, yes sir.

Mr. HENDERSON: We offer that in evidence if the court please. Marked "Def'ts' Ex. 5 D. H. R."

Mr. WEDGWOOD: Do you want to read it?

Mr. HENDERSON: No; is there any objection?

Mr. WEDGWOOD: No, I think not.

Mr. HENDERSON:

Q. Now, how soon after signing that contract did you leave on that visit?

A. I think it was two or three days after.

Q. Two or three days after?

A. It was very shortly after.

Q. Before you went away did you hear anything about or know in any way that the railroad people had commenced a survey that way?

402 A. I do not recollect that I did: if I did as I said this morning, it did not impress me as anything important, or any conflict with our rights.

Q. Now, Mr. Nunn, I want to call your attention to another subject for a moment. How long have you been engaged in and connected with the business of developing power by hydraulic appliances and pressure?

A. In the neighborhood of twenty years.

Q. What is the fact, if you know, as to whether at the altitude of Hanging rock it is colder than it is in the valley?

A. I do not know; but I suppose it may be somewhat colder.

Q. Yes, what is there the difficulty in getting along with ice in the winter?

A. In such streams I think that some difficulty would be experienced in the valley here practically the same as above. The ice forms in the streams where the water is not very deep, and the water reached a point very near freezing, so that it passes over rocks or passes slowly into the flume, it is likely to congeal first into a substance almost like a jelly, just on the freezing point, and then crystal-ization starts through it, and it finally becomes a frozen mass of solid ice. That is not an experience peculiar to mountains; it is an experience everywhere, in all streams, in order to avoid which it is always considered imperative that the water be taken out below the surface, considerably below the surface.

Q. Now, Mr. Nunn, to run a successful plant and to run it as it should be on that stream, state whether there should be a dam in which you could take out the water for some distance below the surface?

A. It would be absolutely necessary. I thinks that every one's experince is alike in that, that in the winter the ice forming from the bottom, or the skim ice forming from the top either one, will mass, collect in masses, and entirely block a small stream or a small body of water, and that the only way to remedy it is to secure a large body of

water that will be held at a temperature of four degrees
403 above freezing, which is the temperature of the smallest capacity, smallest compass.

Q. Yes?

A. Water contracts as it gets cold, so that it naturally sinks to the bottom until it reaches a temperature of four degrees above freezing, and then it begins to expand from that point and rises. So that it has a margin of four degrees there in which to secure a safety for running water.

Q. Now, how much below the surface should it be taken out in order to have it entirely free from suction and from this cause?

A. Well, the distance below the surface that is required, that is not so important for the matter of suction or anything except to secure a large body of water, one that does not chill in a short time.

Q. Oh I see?

A. If we were to have constant extreme cold weather for a time, I suppose that a very large body of water would reach that temperature in which it would freeze, but in a few days, and we never have more than a few days of excessive cold weather at once time, a large body of water will not chill to that point.

Q. Now suppose at Hanging rock, or at Middle rock, or at the places where your dam is, anywhere along there, a dam twenty-five feet high was erected there, and the body of water set back such as that would set back, whether so far as this purpose is concerned, whether it would obviate it, or whether it could be operated rather.

A. I think it would be very useful for the purpose of temperature, securing even temperature, and in my opinion it would obviate any serious difficulty. It would also be useful in holding back a sufficient body of water to equalize the amount that was required for any one day. For instance if we required twice the actual flow of the river for three or four hours during one part of the day when we were operating heavy railroad service, street-car service, or in
404 the evening when we were operating — line, we might require twice the actual flow of the river; at some other part of the day we might not require half of the flow of the river. A reservoir of small capacity, such as twenty-five feet would make at Hanging rock would probably be sufficient to enable us economically to use the entire flow of the river in the winter time.

Q. And state whether that is a necessity in the matter of developing power?

A. That is an absolute necessity, an absolute condition to making use of a large part of the flow of the river. Otherwise the water of the river is running to waste at certain times of the day when only a little is being used, and cannot be stored up to be used when more is required.

Q. In other words, you can only utilize all the time you have got to be gnaged by the smallest quantity?

A. Got to be gnaged by the flow of the river, and if that cannot be followed, of course we cannot dispose of the gross amount. We can only dispose of the minimum flow of the river.

Q. A dam 25 feet high would make it so that during the period of twenty-four hours you could equalize the pressure?

A. We could utilize and use all the water that the river supplied during that 24 hours, that the amount that we did not use at certain hours would be stored there to be used at other times when we required greater than the flow of the river.

Q. Now, Mr. Nunn, I want to ask you how, how much, up to the time that, up to say the time when this suit was commenced, which was in November 1896, how much you had expended, you and your company had expended in this——

Mr. HARKNESS (int.): Summons was served September 14th.

The COURT: I think that is the date, Judge, September 14th.

Mr. HENDERSON: Well, September 14th?

A. I think we had expended about fifty thousand dollars.

Q. Now, how much since that?

Mr. HARKNESS: Well, I did not think the first was material, and I think I will object to the second.

405 Mr. HENDERSON: It is to show that we are going on with the work.

The COURT: You ask the question now, What has been expended since?

Mr. HENDERSON: Yes, since that time up to date, and I shall ask him only in a general way; I am not going into the detail of it.

Mr. HARKNESS: Well, I don't care. I consider it immaterial. I will withdraw the objection.

The COURT: Answer the question.

A. About two hundred thousand dollars, that is the whole industry; I don't mean just in Provo canyon, but I mean in connection with the power industry of Provo canyon, these lines, the work in Mercur and——

Mr. HENDERSON: You mean that includes the line that has been run?

A. That includes the line.

Q. Now, in a general way, what are the works that you have erected?

A. We have erected the hydraulic equipment, which begins with a low diverting dam, headgates, waterways, and a pressure box, pipe line from pressure box to the turbin water wheels, the generator in connection with the water wheels, general power station, the apparatus for raising the voltages or velocity from that which can be safely generated to that which can be economically transmitted over long distances, and the lines of transmission, the reducing stations reducing the voltages from the economical voltage for transmitting the power to that which can be safely handled by the apparatus at the receiving end of the line, the consumers; the lightning protection, and generally all that goes with these several departments.

Q. Yes, now state whether that which you have erected is what in your original plan you talked about as the temporary plant?

A. The hydraulic, including dam, the waterway, pipe line, wheels and so on, that is all of the temporary —.

406 Q. Yes?

A. The electric generating apparatus, generating and transmitting apparatus is all planned for the permanent design, permanent plant.

Q. Now, Mr. Nunn, I want to ask you if you have made any computation as to what the value of the privilege of putting in that dam as you originally intended to put it in, and the one that you would be confined to if you could not raise your dam so as to flow this land in controversy?

A. Well, there would be about three-thousand-horse power difference between——

Mr. HARKNESS: Well, the question was as to whether you made computation?

A. Oh, yes, sir; in a general way. I am so familiar with those matters that I have not gone into minute details or plans, but I can give that very closely.

Mr. HENDERSON:

Q. I will now ask you to state what it is?

Mr. HARKNESS: I object to the question, on the ground that there are no damages in this case shown, no right to the ground; nothing whatever that would give them any right to damages.

Mr. HENDERSON: Well, do you mean by that that we have shown no testimony or given no testimony tending to show an appropriation?

Mr. HARKNESS: Of this land, or of any right to the land or to flow it.

Argued to the court:

The COURT: Objection overruled. Answer the question.

Mr. HARKNESS: We take an exception.

The COURT: This is subject, it will be deemed by the court subject to further evidence pertaining to that question of use and appropriation.

Mr. HENDERSON: I suppose of course that all that the ruling can imply at this time is that there is evidence tending that way?

407 The COURT: On that theory.

Mr. HENDERSON:

Q. Now, Mr. Nunn, if you remember what the question was, just answer it, if not I will ask you again, state what the difference is in value between the enterprise as you originally contemplated it and determined it in October or November, 1895, and entered upon its execution, and that which you now have, that is the value as between the two, the right to maintain the two?

Mr. HARKNESS: Now, I desire to repeat my objection to the question as immaterial and irrelevant, that the difference in value is no damage in the case, and especially as the defendant here has shown

no possession or occupation of the land, or right to possession or occupation. It will be the same ruling?

The COURT: Yes sir.

Mr. HARKNESS: An exception.

Mr. HENDERSON:

Q. Now answer.

A. The difference between the two enterprises would be approximately three-thousand-horse power, not three-thousand-horse power all the year around, but three-thousand-horse power during the two short periods of water, one in the extreme cold weather in winter, and one while the waters above are being used for agricultural or irrigating purposes. The difference is the earning capacity of the two plants would be more than the proportionate increase of size, because the operating expense of the smaller plant would be substantially the same as the operating expense of the larger. I should say that there should be at least a difference of ninety thousand dollars annually, which would be six per cent. on a million and a half dollars. I should think that that is a very conservative estimate; and that there would be at least a million and a half difference dollars difference in the value of the two enterprises when completed,
408 with a cost of probably three hundred thousand—five hundred thousand dollars difference in the cost of completion, making a net difference at least of a million dollars in the value of the two enterprises.

Q. Yes; now can you tell what the difference would be between the plant as you now have it, or as you would be permitted to run it and could only run it if you was not permitted to flood this land in controversy, and the privilege of maintaining a dam at Hanging rock or at Middle rock of twenty-five feet?

Mr. HARKNESS: The same objection.

The COURT: Same ruling.

Mr. HARKNESS: Exception.

A. Practi-ally the value of the enterprise, with the twenty-five-foot dam added to it. I mean by that the present enterprise if we are not allowed any protection, not able to get any protection from the frost of winter nor a small storage for the purpose of equalizing the demand for water during 24 hours, that the enterprise as it stands now is of very little value. Certainly we would never have attempted to develop the water under those conditions.

Q. What would it be worth with a twenty-five-foot dam?

A. With a twenty-five-foot dam it would be, ought to be worth at least ten thousand dollars a month, or $120,000 a year, six per cent. on two million of dollars.

Q. With a twenty-five-foot dam?

A. Yes sir.

Q. Now, what would it cost, including what you have already spent?

A. About $650,000, approximately, $400,000 besides what we have already spent.

Q. Well, now, what would that leave, the difference?

A. Why that would leave a difference of about a million and a half on a six per cent. basis.

Q. Between the present work and the 25-foot dam?

A. Yes sir.

Q. Now, Mr. Nunn, do you mean a 25-foot dam at Hanging rock, or mean a 25-foot dame now from the bed of the river?

A. No, sir; I don't count from the bed of the river; I don't know what that is; I count from the water.

409 Q. I mean from the water; do you figure that that would be worth more than the original enterprise?

A. No, sir; I was speaking about the difference between the original enterprise and the 25-foot dam in the first instance, and now between the 25-foot dam and the present one.

Q. Yes.

A. I consider that the difference is about equal; from nothing to the 25-foot privilege, and from the 25-foot privilege to the one originally contemplated.

Q. But the difference that you figured before was on a basis of between a 25-foot dam, and the one originally contemplated.

A. Certainly.

Q. Well, that wasn't what I asked, so that if that is what you figured I want to get at what I asked, to see what the difference would be between the present enterprise as it now stands and the full enterprise as you contemplated?

A. May the stenographer read that question; I would like very much to get it straight in my mind. The question that I answered, I think I answered that there was about three-thousand-horse power difference between the use of the original plant and the 25-foot dam which you asked me about.

Q. Well, I presume you did, Mr. Nunn, but I did not pay much attention to your answer at that time, I had asked another thing that was all. My mind was on one thing and yours on another. You misunderstood the question. That may stand and be understood then as being an answer to your understanding of it as the difference between the 25-foot dam and your original enterprise; and now I will ask you the question, and if you have not made the figuring you can do that afterwards and give the result.

A. I am prepared for all questions.

Q. What I ask is the difference between the enterprise as it now is, supposing that you couldn't raise it any, raise the river any so as to flow this land in controversy, supposing that you

410 couldn't raise it any, raise the river any so as to flow this land in controversy, supposing that you were confined there, the difference between that and the full 85 feet of obstruction in the river, being sixty feet of filling and 25-foot or storage dam on top of that?

A. Between two and three million of dollars.

Q. Between two and three millions of dollars?

Mr. HARKNESS: Well, that is the same as the former question; I desire it understood the same objection goes in.

Mr. HENDERSON: Yes, of course, that is understood, Judge.

Q. Now, just tell us if you can, Mr. Nunn, how many horse-power each one of these three systems would develop, as nearly as you can, if you had a market for it?

A. The present would develop most of the time from four to *give* thousand horse-power, but there are certain times when it would not develop any.

Q. Well, that is true, Mr. Nunn, I will change the question.

A. (Continuing:) The congealed condition of the river if we had no headwater there would simply shut us off and leave us at the mercy of circumstances.

Q. Yes, I will withdraw that for the present. In generating power, making electricity and transmitting it for use in the market, is it possible or is it profitable or practicable to sell on the market any more than the minimum amount that the stream will develop?

A. No, sir; no customers—oh, I would not say that there may not be instances in which——

Q. No, I am asking for the commercial rule now, the business rule?

A. No, the consumers of power want power all the time and so contract it.

Q. Would it be practicable or would it be business sense to erect a mill to use greater than the minimum capacity of the stream?

A. No, sir; it would not.

411 Q. Well, now, with that foundation then I will ask you——

A. Pardon me, you said of the stream.

Q. Well, of the work?

A. Of the attainable flow, I suppose you mean?

Q. Of the attainable flow I mean.

A. Yes, sir; whether that is the attainable flow by reservoir or of the stream.

Q. Well, I mean of the flow, whatever the conditions may be, taking the water through. Now, Mr. Nunn, I will ask you to give us the minimum horse-power of each one of these three systems?

A. I am met in my answer with that same difficulty that I found before; the minimum would be nothing without a body of water at the head to insure constant flow in winter.

Q. Well, would there ever be a time, Mr. Nunn with the present when it would all be shut off.

A. Yes, sir; it was last winter. To be sure it was stated that there was colder weather last winter than ever before, but there was a time last winter.

Q. Well, we have a time of that kind every winter you know.

A. Well, that may be very ordinary, but there was not fifty-horse power running down that stream for a time last winter; it was congealed.

Q. Let me change the question again a little; give us in the first place the minimum horse-power of the 25-foot and of the original plan, well, give that first.

A. The original plant should have looked to the development of from nine to ten thousand horse-power constantly all the year round by the storage of something over three hundred millions of cubic feet

Q. Which system was that?

A. The upper one, the largest.

412 Q. Yes; the original one.

A. The twenty-five-foot would develop between five and six, perhaps fully six thousand horse-power.

Mr. BROWN:

Q. The year round?

A. All the year round, every day; it would sell that power as called for; the present one would enable us to sell except in these cases of extreme cold in the neighborhood of from four to four and a half or five thousand horse-power.

Mr. HENDERSON:

Q. During the extreme cold nothing at all?

A. Nothing at all; there would be the very great danger; the danger I think Judge I answered it, the danger is so great that we never would have undertaken the development of the enterprise if we had had any idea that we would not have headwater to begin with, in a reservoir of some kind to give us headwaters.

Q. Yes exactly?

A. And for that reason I regard the present investment without that as practically valueless, or simply the nominal value of what we have in it, possibly $250,000, not to exceed that.

Q. Yes.

A. And I do not think it is of sufficient value to think of such a thing as increasing the size of the plant if——

Q. (Int.) Let me ask you if there is a market for all power that would be developed by these various systems?

A. There certainly is a great deal more than that amount of power being used in the district tributary to it now.

Q. Where?

A. At Mercur and Tintic and all of the camps there, Bingham and more or less at Park City too.

Q. Now, Mr. Nunn, if you know, I wish you would tell us how—reduce or give us the equivalent of these horse-powers in coal in developing power?

Mr. HARKNESS: What is this designed for, to show the profits of the institution?

413 Mr. HENDERSON: To show what it is worth.

Mr. HARKNESS: Well, he has given in gross the difference.

Mr. BROWN: And to show how much coal it would save.

A. Of our ordinary common coal it would take about thirty-five tons to the horse-power a year, multiply that by ten thousand, 350,000 tons; something over a thousand dollars a day would be a very conservative estimate on a very high grade of coal.

Mr. HENDERSON:

Q. Of soft or hard coal?

A. No, that is the bituminous coal, the soft coal, it would be a high grade of steam coal I am figuring on.

Q. Now that would — for the amount developed by the upper plant the 85-foot dam?

A. Yes sir.

Q. And now, if you can tell in a moment by running it over in your mind, just make the computation about the 25?

A. Well, about two-thirds of that for the middle one, which would be 225,000 tons, something over 8700 a day.

Q. And the present one approximately, as near as you can?

A. Well, the present one as it is put in is about one-tenth, a little over one-tenth of the full plant, which is only 35,000 tons, something about 3,000 tons a month; that is all that amounts to.

Q. Mr. Nunn, I want to ask you if at any time—you know this Ferguson land, of course?

A. Yes sir.

Q. Do you, I will ask you first if you regard it as practicable and perfectly safe to maintain, to erect and maintain at Hanging rock, or at Middle rock, or in that vicinity, or at the present dam that you had got, such dams as you have described?

A. Absolutely safe; they are nothing compared with dams elsewhere; and there is no danger from a dam properly constructed where too great economy is not used in the construction.

Q. And you say also that the twenty-five-foot dam could be built there with perfect safety?

414 A. Absolute safety; as absolutely safe as the walls of the canyon itself.

Q. What would be the consequence of a twenty-five-foot dam giving way in that canyon, as to its effects down the river?

A. If it gave way in low-water time it would not exceed the high-water flow. If it gave way in high-water time of course it would spread out somewhat greater. But the force and velocity would be largely controlled by the narrow points in the canyon, if it gave way at all,——

Q. (Int.) I will ask you if in your opinion there is any condition by which a twenty-five-foot dam there if it were taken out suddenly, bodily as to come out all in a body it could do any possible damage below the mouth of the canyon.

A. No sir; it would do no, it would be impossible to do any serious damage. When you say any possible damage, if a party with a team was getting some sand in the river and could be affected by a rise of two feet he might be damaged to a small extent. It would not overflow the banks in many places, and it would not, it could not destroy property along its course. It only requires a little figuring to show that the water could only go out of the canyon at a certain velocity, and that the amount of the water and the length of time it would take to drain the small reservoir like that, would not be anything compared with the extreme high-water floods.

Q. Yes, as canyons average through these mountains, it isn't a steep canyon is it?

A. No sir: it is I think by far the lowest grade, by far the lowest grade of any of the streams of Utah with the exception of the Jordan river on the lake down here. It is a very even canyon. The fall is less than 15 per cent., while in the Cottonwoods we have a 160-odd feet fall in a mile, and in Logan river, and here there is no place where there is over 80.

Q. Yes?

A. And the canyon is not abrupt at any point.

415 Q. Mr. Nunn, now you know this particular land in controversy?

A. Yes sir.

Q. You knew Mr. Ferguson in his lifetime?

A. I did.

Q. Now, when did he go up there, do you know when he went onto his land?

A. I do not; he was there before ever I visited the canyon.

Q. Well, was there any other person occupying any land up there above Hanging rock?

A. Do you mean inside of our reservoir?

Q. Yes, inside the reservoir as you laid it out?

A. As I was told by *by* engineers, no.

Q. Well, didn't you have general charge?

A. I had general charge. I saw none, but as to what any one may have claimed or filed on I could not tell by observing; but I saw no one.

Q. You saw no one, and you heard of nobody, did you?

A. I never heard of anybody.

Q. That is, Mr. Ferguson was the only one?

A. Was the only one.

Q. And he was occupying this land was he?

A. Yes, sir.

Q. And living there on it; did you at any time make any contract with him for its purchase?

A. I did.

Q. For his right there?

A. I did.

Q. At what time did you make that arrangement?

A. I made a preliminary arrangement in the fall of '95.

Mr. HARKNESS: Well, wait, was that in writing?

A. Not the preliminary arrangement, no sir.

Q. Was the final one in writing?

A. Yes sir; there was one in writing.

Mr. HARKNESS: I think that is the better evidence.

Mr. HENDERSON: The one that he is testifying about now was not. I want to know. I will show the written contract when I get to it, but I am leading up to it. That was in 1895?

A. 1895, yes, sir.

416 Q. And afterwards did you finally carry that out by entering into a written contract with him?

A. Before I entered into a written contract I saw him in the spring of 1896, and arranged with him definitely for the purchase of the land at fifteen hundred dollars I believe, and that was——

Mr. HARKNESS: I object to that if it was in writing.

Mr. HENDERSON:

Q. Well, you entered into an arrangement with him which was afterwards put in writing?
A. That was afterwards put in writing.
Q. Now, I will show you this and ask you if this is the writing?
A. Yes, this is the one.

Mr. HENDERSON: That is it; we desire to offer that.
Mr. HARKNESS: The only objection we have to it is, it is immaterial and that Ferguson had nothing he could convey to anybody.
The COURT: Let it be admitted.
Mr. WEDGWOOD: Note an exception.
Paper marked "Def'ts' Ex. 6, D. H. R."
Mr. HENDERSON, reading:

"PROVO CITY, UTAH, *April 24th*, 1896.

Whereas L. L. Nunn is desirous of purchasing all my right, title and interest both in law and equity to the property hereinafter described, and of obtaining a good and sufficient warranty deed therefor, conveying the indefeasible title: Now therefore, this agreement and presents witnesseth, that for and in consideration of the sum of one dollar to me in hand paid by said L. L. Nunn, the receipt whereof is hereby acknowleged, I do hereby promise, covenant and agree that at any time within ninety days from the date hereof, I will make, execute and deliver to said L. L. Nunn, or his assigns, if so requested by him or them, for and upon payment of twenty-five hundred dollars, a good and sufficient conveyance, conveying all my right, title and interest, both in law and equity, in and to the following-described property, to wit: That certain one hundred and sixty acres of land situate in Provo canyon, Utah county, Utah, and known as the toll-gate, and upon which I am now living, the
417 same being four forty-acre tracts lying lengthwise along Provo river in said canyon, and being in section 26, township 5 south of range 3 east of Salt Lake meridian.

And I further promise and agree in consideration of said sum, to take all steps necessary to obtain title to said land provided said L. L. Nunn within said ninety days will agree to pay all necessary fees and expenses therefor, and to homestead said lands or obtain title in any way desired by L. L. Nunn and to obtain title thereto.

And I further covenant and agree as soon as title is obtained to convey to said Nunn or his successors or assigns, by good and sufficient warranty deed, all my right, title and interest in and to said land, upon payment to me of the sum of twenty-five hundred dollars.

In witness whereof I have hereunto set my hand and seal this 24th day of April, 1896.

(Signed) W. W. FERGUSON.

Signed, sealed and delivered in the presence of—
ELTON HOYT AND
W. H. KING."

Q. Mr. Nunn, is the land, you know the land that is described in that contract, do you?

A. I know the Ferguson land, yes sir.

Q. This covers the land in controvery, here, does it?

A. Yes sir.

Mr. HENDERSON: Now I want to withdraw this witness for the purpose of putting in a deed.

Mr. HARKNESS: I would like to ask Mr. Nunn as to what.

Mr. HENDERSON: Which the——

Mr. HARKNESS: The deed; whether he has the original.

A. I think not sir.

Q. Do you know where it is?

A. I do not*l* it may possibly be here, but I was away when
418 that contract was terminated, when the deed was given, and I don't remember ever having seen it.

Mr. HARKNESS: Well, we won't object to the copy, only I would like to see the original if you can find the original I would like to see it.

A. All right, I will see if I can find it.

Mr. HARKNESS: I mean because it is a copy, that is all.

The COURT: Does the court understand you Judge Henderson that you want to withdraw——

Mr. HENDERSON: Well, I don't have to withdraw it, because they don't object. I offer now the deed bearing date the 26th day of December, 1896, made in pursuance of that contract.

Mr. HARKNESS: The objection is that it is immaterial, that the grantor had no interest he could convey, to any grantee, and that it was made after this suit was commenced two or three months.

Mr. HENDERSON: Well, I will ask, to obviate that, I will ask Mr. Nunn a question?

Q. I will ask you Mr. Nunn, if the deed that was taken from Mr. Ferguson was taken in pursuance of that contract?

A. It was.

The COURT: Let it be admitted.

Mr. HARKNESS: Same exception Mr. Reporter.

Mr. HENDERSON: Now, I will say we have ordered a certified copy of this, and it will be up here and we will put that in in place of this, but I will state, the deed is from William W. Ferguson, the grantor of the land known as the toll-gate, in Provo canyon, and so far as can be ascertained is part of the west half of the southwest quarter of section 26 and the northeast quarter of the southwest quarter, and the southwest quarter of the southeast quarter of sec-

tion 26, township 5 south of range 3 east of Salt Lake meridian, and the southeast quarter of the southeast quarter of section 27 in said township, and upon a consideration of $2,500. It is dated
419 December 26th, 1896, acknowledged on that date, and it is signed in the presence of Samuel A. King and Jacob Evans.

Mr. HARKNESS: Just give the book and page of record it is.

Mr. HENDERSON: The record is Record 38 of Deeds, page 129.

Q. When did you first pay anything on the contract?

A. Some time in July.

Q. Of what year?

A. July '96—I say July it may have been June, I remember Mr. Ferguson wanted some money at that time, and it was paid in advance, and in consideration of an extension of the contract for the balance of the payment.

Q. And what was it, was that the date of the extension?

A. I don't remember as to that. I don't remember when the date of the extension was, but Mr. Ferguson wanted 300, I believe it was, and I let him have it.

Mr. HARKNESS: He wants to know if it was paid at that time the extension was made?

A. Well, that I do not know; because I didn't have the extension made.

Mr. HENDERSON:

Q. How much was paid at that time?

A. Three hundred dollars, if I recollect rightly, I advanced it.

Q. And after that you say this deed was given, the final execution of the contract?

A. Yes sir.

Cross-examination by Mr. HARKNESS:

Q. Mr. Nunn, I think you first directed some attention of this canyon in 1893, if I am correct?

A. Yes sir.

Q. In '94 you came here in person with an attorney and perhaps other parties?

A. No, sir, I came with Mr. Holbrook.

Q. With Mr. Holbrook?

A. Yes sir.

Q. That was in 1894?

A. That was in 1894.

420 Q. And went up the canyon with him?

A. Yes sir.

Q. What date was that in 1894?

A. I think it was early fall.

Q. What?

A. Early fall; I think it was in September.

Q. Did you leave Mr. Holbrook in charge or with any authority in the business when you went away?

A. I did.

Q. Do you know whether after you went away he put up any notice of location in the canyon?

A. I believe he did.

Q. Did you ever see it?

A. I think not.

Q. Do you know where he posted that?

A. I have an impression that it was not very far from the county bridge, but I don't know.

Q. How far is that below Hanging rock?

A. About a mile.

Q. Isn't it over a mile?

A. I think not, to exceed four hundred feet.

Q. You know a place there called Bridal Veil falls?

A. Yes, sir; that is about, by the bridge.

Q. What?

A. Very close to the bridge, Bridal Veil falls is.

Q. And that you understand to be the place where he posted it?

A. On the opposite side of the river some little distance above there, I believe. The reason I think so was because there was some clearing being done there at one time when I went up the canyon.

Q. You don't remember of ever seeing the notice there?

A. I do not; I don't think I ever saw it.

Q. In the spring of 1897 you was here and testified in court, was you not?

A. Yes sir.

Q. Did you see the notice then?

A. The notice?

Q. Yes?

A. No sir; I did not see Mr. Holbrook's notice on the ground.

Q. No, but I mean the notice here in court?

A. Oh, I didn't understand you. I may have seen that.

421 I believe Mr. Holbrook exhibited that notice.

Q. Could you tell if I should show you a copy of that notice whether it is correct or not?

A. I could not.

Q. Was that notice posted by your direction?

A. Partially, and partially not. I stated that I had been informed by Mr. Dixon that no notice was required, but that certainly one wouldn't do any harm.

Mr. HARKNESS: I move to strike out that answer as not responsive.

Mr. HENDERSON: I think it is responsive.

The COURT: Read the question that was propounded to the witness.

Question and aanswer read.

Mr. HARKNESS: I move to strike out all that he has been informed.

The COURT: If he desires afterwards to make any explanation on those matters; the answer was more than was asked; was not responsive. Let that part go out with regard to what he was told.

Mr. HENDERSON: Well, what part stands then?

The COURT: Well, that partically he did and partially he did not. I think what he was told by somebody is not proper.

Mr. HENDERSON: Well, if the court please, I think it is proper to tell just what the fact is about it, just what he did do.

The COURT: Well, as to what he did.

Mr. HARKNESS: You can ask him, if you want to, what he did.

Q. You answered here that when you was here in 1894 you found nature had fixed the place for a dam?

A. No sir, I made no such statement.

Q. Didn't you say on your direct examination something about nature having fixed a place for this dam?

A. I said nature had fixed the place for the waterway.

Q. For what?

A. For the waterway, the canal down the canyon, and that
422 it was only a question of how to get the water into the mouth of the canal.

Q. Then nature had not fixed any place for a dam so far as you know?

A. Well, I did not observe it specially at that time.

Q. You say that when you was in here in the fall of 1894, you instructed the engineers to lay out a level, what level was that?

A. That was the level on this bench which I said nature had fixed; and also——

Q. (Int.) Where did it begin and where end?

A. It ended practically at the mouth of Provo canyon.

Q. And where did——

A. (Int.) It ran up to within a few hundred feet of the Hanging rock. The question at that point was whether——

Q. Well, you have answered my question?

A. Very well.

Q. You haven't yet stated at what level that was run?

A. Yes, that was at the Suhr level, or sixty-foot level.

Q. Sixty-foot level?

A. Yes sir.

Q. How many feet below the Hanging rock did that terminate, did the level that you directed run terminate?

A. I did not testify that I directed that level run at that time. I testified that it was late in the season and little was done except the examination of that bench, and Mr. Matthis' work in the canyon, running the level from which this map of Mr. Matthis was done. The direction to run that level was the following year.

Q. In 1895.

A. In 1895.

Q. Then the level which you have just described is the one that you directed in 1894, is that correct?

A. Yes, sir, now please let me explain. There is a difference between the selection of that as a proper place to build a canal, and between the instruction of the engineers to lay out that canal. We determined on that as the proper place to build the canal in 1894.

Q. In 1894?

423 A. I instructed the engineers to lay out that canal in '95. I don't want to have those two points confused.

Q. The determination in 1894 was a determination in your mind, was it not?

A. I believe that all *phys*yc-ological determinations must be in the mind. I am not aware of any physical possibility of a conclusion.

Q. Do you know of any work done on the ground in 1894, to carry out that determination?

A. 1894.

Q. Yes.

A. I said that when I was there with Mr. Cramer and the chief engineer there was some examination of the soil to see whether it was good for holding water. That was all the physical work.

Q. That was all that was done?

A. That was all the physical work that was done there in 1894.

Q. Was that physical work?

A. Yes, sir; it was physical work, digging.

Q. Determining the character of the soil.

A. Digging some holes to examine the soil.

Q. Oh, you did dig some holes?

A. Certainly.

Q. Now, can you tell how many feet below Hanging rock the upper end of that level as run in 1895 was?

A. How many feet below Hanging rock?

Q. Yes?

A. It was some distance above Hanging rock; it went beyond Hanging rock.

Q. Oh, went on above Hanging rock for some distance?

A. Yes, sir.

Q. The survey went above Hanging rock?

A. Yes sir.

Q. How far?

A. I don't remember; a few hundred feet. The purpose was——

Q. Well never mind the purpose it was carried on above Hanging rock?

A. It was carried on above Hanging rock, yes, sir.

Q. How was it marked on the ground from the place that is known as Middle rock up to where it terminated?

424 A. By the same stakes, surveyors' plugs, two inches square.

Q. How long were they?

A. I should say about 14 inches long; sharpened so as to drive into the ground within five and six inches of the ground.

Q. Did you ever go over that line yourself from the Middle rock to the Hanging rock?

A. Yes sir.

Q. Was there any brush there?

A. Very little brush from Middle rock up to Hanging rock; that was quite abrupt; quite a steep side hill.

Q. And that was marked by a line of plugs?

A. Yes sir.
Q. Surveyors' plugs?
A. The same as those that ran down below the same level.
Q. The plugs were set as you have described?
A. Yes sir.
Q. Was any other work done in 1895 than the running of that line?
A. Yes sir; there were five or six different trial levels run by Mr. Suhr from September to January, to the following January.
Q. From September until January?
A. Yes sir.
Q. Now which was the higher of those several levels?
A. One about forty feet higher than the sixty-foot level was——
Q. (Int.) Higher?
A. About forty feet higher, I should say, if I remember correctly. Some little distance higher.
Q. That would be a hundred feet higher, hundred feet above the river?
A. Above the river at Middle rock.
Q. Yes?
A. That was I think only a short level, as I remember it, it was run out perhaps for a mile or two.
Q. What was that aiming for?
A. That was with a view of ascertaining in a preliminary way the relative condition of the country with the idea at one time of pitting a ditch that is taken by the Carys for their water. There is quite a large amount of surplus water coming down that——
Q. (Int.) The idea of carrying water up there by ditch.
A. Carey takes his water from a large spring that starts up
425 in there, and that line was run at the suggestion of Mr. Carey to start with.
Q. Now, we have two; the hundred-foot and the sixty-foot; what was the next below that?
A. The next trial line, I don't know exactly, I think it was in the neighborhood of forty feet below.
Q. Forty feet below the sixty-foot?
A. Yes sir.
Q. Then it would be about 20 feet above the water level?
A. Yes sir.
Q. How much was done on that trial line, or how far was that run?
A. That was run quite a long distance.
Q. Well, where?
A. Probably I think it was within a mile and a half of the mouth of the canyon.
Q. Where was the upper end of it?
A. The upper end was nearly up to Middle rock.
Q. Then it was all below Middle rock?
A. I am not certain whether it went up a little above or not; but practically below Middle rock.
Q. And the next one lower was that your flume line?

A. Yes, sir; I think the next one was the flume line, and there was one run below the flume line.

Q. What?

A. There was one run below the present flume line.

Q. Well, the one on the flume line where was that to connect with the river?

A. On the present flume line.

Q. Yes.

A. The engineers designed it to connect at Middle rock, but I determined to put the diverting dam in a few hundred feet below, at the present place, preferring to increase the height of the dam a little rather than to increase the length of the flume.

Q. Now, that is some fourteen or fifteen hundred feet below Hanging rock, is it not?

A. I think it is about thirteen hundred feet below Hanging rock.

426 Q. Now you ran that line still lower?

A. Yes sir.

Q. Where did that begin and end?

A. That commenced, took the water out of the river a little above the bridge and passed just back of Mr. Thayer's house.

Q. How far is the bridge below the Middle rock?

A. Well not far over a mile, I think.

Q. I understand you to say that when you were here in December, '95, that these lines, these several trial lines had been run for the preliminary dam?

A. For the preliminary waterway.

Q. Waterway; well, was that waterway to have any dam?

A. Enough to divert the water.

Q. Of the river?

A. Of the river; enough to get the water from the river into the waterway only.

Q. It was at that time, if I remember rightly, that you decided to continue as you say the Telluride plan, the plan you had followed in Colorado, as to diverting the water up in that country, I didn't get the correct idea?

A. Well, no sir; you didn't get my idea so far as the diverting of the water was concerned. I intended to answer that at the time I was here with the president and the other officers of the company was the time that it was determined to utilize this power practically in the same way, so far as the generating of electricity and sale of it to mines and general customers, as we had adopted in Colorado. The physical conditions are so different that it would be impossible to carry out the same plan of hydraulics.

Q. Well, that was the determination that you made, in that fall, December, '95?

A. October, '95.

Q. Well, I had it December, perhaps I got the date wrong.

A. October, '95.

Q. Now, you came here again in the spring of 1896, if I am right, in March?

A. Yes, sir.

427 Q. You stated, I think, Mr. Nunn, that when you came here in March, they were at work grading on the sixty-foot level up in the direction of the Hanging rock?

A. Well, I said I was uncertain about that.

Q. Did you hear Mr. Searles testify yesterday?

A. Not on that subject; I was in two or three times during the day.

Q. Did you hear him testify that on the 27th of March he pegged a line from near Middle rock up to that level, and then spent about twenty-five per cent. of his time running up from the Hanging rock around it on the sixty-foot level?

A. No, sir; I did not hear him say that.

Q. Didn't hear him testify so; well, now, do you know that that line up to Hanging rock or any line was made previous to the time that Searle did the work?

A. Yes, sir; Mr. Suhr ran that up the fall before. I feel very certain of that.

Q. You feel very certain about that?

A. I feel quite certain.

Q. Then Mr. Searle must have been mistaken in saying he pegged a line up there and ran it?

A. Why so.

Mr. HENDERSON: I object to that if the court please. I don't think Mr. Searle testified to that; of course, I don't know would not say absolutely, if Judge Harkness' recollection was the other way?

The COURT: I don't remember just what the language was. There was some testimony pertaining to that.

(Discussion of testimony between counsel to court.)

The COURT: Answer the question.

Mr. HARKNESS:

Q. Now, you say Suhr had already run a line up as far as Hanging rock on that level and beyond Hanging rock?

A. Yes, sir; a little beyond Hanging rock.

Q. What kind of a line was that?

A. It was a level line such as is always run.

428 Q. Is it one of those preliminary lines that is marked with pegs?

A. A mere preliminary line is not so substantially marked as the one that it is designed to work from. This was marked with plugs as they are called two inches square for permanent work.

Q. Well, what did Mr. Searle do when he commenced on that line opposite Middle rock and ran up?

A. Well, I think very likely, I don't know. I think very likely that Mr. Cramer instructed him to check that work over. It was very important and would only take a few hours to run on, because he was to complete the survey from where Mr. Suhr left off.

Q. Well, did you see afterwards or know then that Searle when he ran that set stakes such as he set on the sixty-foot level for part of the contour?

A. I don't remember that Searle set any stakes on the line between the Middle rock and Hanging rock, but I don't know but what he did.

Q. And what time was it you stated you determined on the place for the temporary dam?

A. In December, 1895.

Q. Then in '96——

A. Excuse me, I determined on the level for the present flume grade or the temporary flume grade, determined on the level which we are now using as the temporary level. The exact place for the dam I did not determine until I think it was March the following March. There had been considerable grading done on that line, and there was no change of the line, but I simply changed the head, the entry.

Q. Then it would be in March, 1896, that you determined on the place where you would set your present diverting dam.

A. The exact point of the present diverting dam, yes sir.

Q. Now in 1896, what work was done on that ground?

A. In '96, the present grade was extended down to the distance of about nine thousand feet, a little less than two miles, to the present power-house, a little beyond the present power-house.

429 Q. On what level?

A. On the present level that we are using.

Q. How far is there any height to that above the river?

A. As a rule that is about sixty feet below the Suhr level.

Q. Well, what other work?

A. The Suhr level was graded preparatory to receiving the flume, or the upper part of it. The grading was continued on there until some time during the midsummer.

Q. What time did grading commence on the Suhr level in '96?

A. I stated this morning that I thought it was the latter part of March. It was however after Mr. Madden was put in charge of the grading, and that was after the 4th of April; it was possibly between the 4th and 6th of April.

Q. Where did they begin their work?

A. I don't know because I was not here at that time. When I came they were working I should think for a space of a thousand feet along that grade.

Q. But it was after Madden went there April 4th that that was commenced?

A. Yes, sir; I think between the 4rth and 6th.

Q. Do you remember a trial in this court in the spring of 1897, I think?

A. Yes sir.

Q. Up until that time and excepting the contour stakes which Mr. Searle testified about what work if any had been done on the ground at Hanging rock or above it?

A. Before what date

Q. Before the date you testified a year ago, here, before the trial of that case, say April '97?

A. Why, there had been nothing done since.

Q. Well, had there been anything done up to that time?
A. Had there been?
Q. Yes.
A. Yes sir.
Q. What had there been done excepting what Mr. Searle stated, about setting contour stakes?
430 A. There was quite a large amount of work done in sinking pits to determine bed rock, which is absolutely the first work to be done, and that was commenced when Mr. Cramer was here, I think in the fall of '95, and all of that flat was cleared off of the brush, so that and the brush burned so that it could be easily determined where the best opportunity could be found to explore the ground, and the pit holes were sunk in a good many places as far as could be without power pumps.
Q. Where were those pit holes?
A. Right between the hanging rocks.
Q. How many were sunk?
A. I can't remember.
Q. Did you see them?
A. Yes, sir; I saw some of them.
Q. How many did you see?
A. Well, I may have seen two or three, and I may have seen three or four.
Q. Well, were there three or four?
A. I am sure there were two or three; I am almost positive that there were four.
Q. How deep were they sunk?
A. I think the water was to within ten or twelve — of the top when I saw them, and I understood that they were down about twenty feet.
Q. The whole depth, twenty feet?
A. Yes sir.
Q. Ten feet in water?
A. Yes, sir.
Q. Did you understand that they had found any bed rock there?
A. No, sir; they had not.
Q. Now, with the exception of those holes and the clearing off of the brush, what was done towards a dam at Hanging rock?
A. I think there was nothing done with the exception of that, but that is quite a large amount of work.
Q. How large around were those pits, or how large across, in diameter?
A. I should say that they were just sufficiently large for comfortable work; I should say probably twelve feet long by four feet wide, so that the dirt could be thrown from side to side.
Q. Were they in sedementary deposit ground?
431 A. Well, that is all sedementary, but it was rather sandy.
Q. Sandy?
A. It isn't in rock at all.
Q. Those you think were made in 1895?
A. No, not all of them, because I am sure Mr. Cramer was working

there in the spring of '96. I believe I can get his report on those, if you wish it, tomorrow morning.

Q. Had you diverted any water up until April 1897, at any place from the stream, from the river?

A. Yes sir.

Q. Where?

A. We had diverted it from the river to these pit holes in 1895.

Q. How were they diverted, how was the water diverted?

A. By flowing through soil.

Q. Seepage?

A. Yes sir.

Q. Do you call that diverting water, seepage?

A. Well, I was uncertain as to what you — inquiring of.

Q. Are you sure that you were uncertain Mr. Nunn?

A. That is one way of diverting, certainly; it is taking it out.

Q. Had you taken it and appropriated to any use any water prior to April, 1897 from the river?

A. I think not, sir.

Q. Had you any work that reached the river in any place to divert the water?

A. Certainly.

Q. What work?

A. A line that——

Q. What?

A. A line.

Q. Do you call a line work?

A. Most emphatically.

Q. Can you divert water on a line?

A. You didn't ask me whether I diverted it. I said I had not.

Q. I asked you if you had any work to divert water?

A. Yes, sir, we had.

Q. What was that?

A. It was a preparation line for the grade, both by surveying and grading.

Q. That you call diverting water?

A. No sir.

432 Q. Now, had you turned any water out of the stream previous to April, 1897?

A. Yes, sir.

Q. Had you any ditch, canal, or other means carried to the river which could divert it, and turn it out, if so state?

A. We had a part of one, yes sir.

Q. Where was that?

A. That was on the line, the line is a part ditch.

Q. What line?

A. We had cut the brush and prepared for the actual grading of the line to take the water out at that place. We had not diverted the water, as I had stated several times.

Q. Had you any ditch or canal by which you could divert the water?

A. We had no ditch completed, consequently we did not divert the water.

Q. Wasn't the only ditch you had approaching the river then the one by which you now divert it, or I mean, it isn't a ditch, it is a flume?

A. We had no ditch completed at that time. We had not diverted water at that time, we were simply working as fast as possible to that end.

Q. Had you made or recorded any notice of an intention to divert the water?

Mr. HENDERSON: I object if the court please. It isn't in cross-examination of anything we asked him.

The COURT: Read the question, Mr. Reporter (question read).

The COURT: Let him answer the question.

Mr. HENDERSON: Give us an exception.

A. What was the question?

Mr. HARKNESS:

Q. I am speaking of written notice now, so that you will understand it.

A. What was the question, Judge, please?

Q. Had you made or recorded or posted any written notice of intention to divert the water from the river?

A. No sir.

433 Mr. HENDERSON: I object to it as immaterial and not cross-examination, especially because it is immaterial; it isn't a necessity, wasn't at that time, and no part of the performance of diverting water under the statutes of Utah.

The COURT: I have admitted very much here that went to the intent of the appropriator, or of the defendant in that matter. Let him answer that question.

Mr. HENDERSON: Give us an exception.

A. I answered.

Mr. HARKNESS: He has answered, said no sir.

Mr. HENDERSON: The record will be then that we move to strike it out, and it is overruled and we note an exception.

The COURT: Yes sir.

Mr. HARKNESS:

Q. After April 1st, 1896, during the remainder of that year was there any work done above Hanging rock?

A. Yes sir.

Q. Or in the basin, or what you call the reservoir?

A. After April 1st?

A. Yes?

A. Yes sir.

Q. What was it?

A. It was that which I have described before, and also the run-

ning, and cutting out of the brush, and staking of the contour lines of the reservoir all around.

Q. Was that done by Mr. Searle?

A. Yes sir; done by Mr. Searle and his assistants.

Q. Well, and his assistants?

A. Yes sir.

Q. He and his assistants?

A. Yes sir.

Q. Has any other work other than that been done since?

Mr. HENDERSON: I object to that; that is since the commencement of this suit, is it?

Mr. HARKNESS: Well, I said in '96, during '96 the other question.

Mr. HENDERSON: Well, I object to it, so far as it relates to matters since the commencement of the suit I object to it.

434 The COURT: There was some examination, or some testimony in regard to what improvements they had made since in his direct examination.

Mr. HENDERSON: Yes, as bearing upon the question of values, and as to that, if it is for that point we have no objection to it at all.

The COURT: Well, it has not been disclosed yet what the purpose was.

Mr. HENDERSON: No; if it is put in on that ground we haven't any objection to it. (Question read.) Now the objection is, I object to that part of it that applies to the time since the suit was commenced, and I say in connection with it, if it is offered for the purpose of replying to his testimony in relation to value, of course I have no objection to it.

The COURT: Objection overruled. Let him answer the question just what the purpose is, I know there was quite an amount of questions propounded, and answered, in regard to the improvements.

Mr. HENDERSON: Then I save an exception unless it is stated by the court that it is received for that purpose, and if so I have no objection.

A. Really I have forgotten the question again. (Question read.)

Mr. HARKNESS:

Q. Other than that you described in 1896, on this reservoir ground?

A. Since April 1st, '96.

Q. No since the year 1896; you answered during 1896, that Mr. Searle set the stakes etc.

A. Well, I did not state all the work that was done in 1896. I understood what was done in the spring of '96.

The COURT: The question is as the court understands it, since the year '96, that would be in the year '97.

A. No sir; I think there was nothing done during the year 1897.

435 Mr. HARKNESS: How high is your dam where you are diverting the water at the present time?

A. Measured from the old bed of the stream I think it raises the

water about six feet measuring from the bottom of the structure I think it is over 12 feet. It is sunk in the bed of the river.

Q. You want a higher dam to get more water and power?

A. Yes sir.

Q. Has anybody objected to your raising it to fifteen feet?

A. I don't know where the line of objection comes in. I have understood that the railroad objected to our existing in the canyon at all.

Q. Who did you understand that from?

A. From their general conduct.

Q. Did anybody tell you so?

A. Not in so many words, no sir.

Q. And you probably don't know whether they considered or objected to your being in the canyon at all?

A. I have a good reason to believe.

Q. I ask you has anybody objected to your raising the dam, to raise the water fifteen feet; you have raised it six you say?

A. I don't know the order of the injunction.

Q. Don't you know you was permitted to raise the water fifteen feet?

A. No sir; I do not.

Q. Never even inquired about that?

A. I have not inquired; if that was the question.

Q. And yet you want a higher dam and more power?

A. We don't want a higher dam and more power for this temporary dam.

Mr. HENDERSON: Just a moment. I object to the question as based upon nothing that exists in this case in any way, shape, manner or kind.

The COURT: As to this injunction?

436 Mr. HENDERSON: As to an injunction or as to permission to raise it fifteen feet.

Argued to the court.

Mr. HENDERSON: That railroad survey runs how near to the dam?

A. I understand it is within two feet of our present dam.

Q. Yes, runs right above the dam on the dam, almost?

A. Yes sir.

Mr. HARKNESS: It was laid out so as to leave a fifteen-foot dam.

Mr. HENDERSON: Well, Judge, I know you think so or you wouldn't say so, but there is nothing here absolutely to show that is so, as a fact, but our information is different and Mr. Nunn's information is different, and I challenge the statement as a matter of fact, that it is laid out in a way that the line goes right square down into it and takes it——

The COURT: The court is not informed as to an injunction of that kind or any arrangement, if there is anything I would like it.

Mr. HARKNESS:

Q. Mr. Nunn, I will ask you whether you do not know that you

was at liberty to raise the water fifteen feet at the place where your diverting dam is?

A. I do not know it.

Q. How?

A. I do not know it.

Q. Did you ever enquire to find out?

A. I have.

Q. Who have you enquired of?

A. I did not enquire exactly that way. I enquired from my engineers how much difference there was between the level of the railroad as laid out at that point and the present diverting dam, and was told that it was two feet.

Q. Two feet?

A. Yes sir.

Q. And you didn't raise it only six feet above the water level because you say you had no right to.

A. No, sir; I did not say that. I think we have a right, but I did not raise it because this is a mere temporary matter,
437 and because all I wanted was to turn in a small amount comparatively, into the flume, and it was not necessary to put a large construction in there at great expense for temporary work.

Q. Now in giving the estimates of the present value of your power here compared with a twenty-five-foot dam, and compared with an eighty-five-foot dam, have you considered your dam as it is as the one limited by six feet above the water?

A. I have not considered that we were limited at all. That is what we are trying this case for.

Q. Did you not give to Judge Henderson estimates of power, or the value of your present power, the value of it with a twenty-five-foot dam, and the value of it with an 85-foot dam?

A. Yes sir; and the value of it without any dam except that which we now have.

Q. What did you mean when you said present dam or present power?

A. The present, just as it is.

Q. As it is?

A. Yes sir.

Q. That is six feet above the——

A. (Int.) The high-water mark, the natural——

Q. Above the what?

A. Six feet above the natural condition of the stream.

Q. Of the stream?

A. Yes sir.

Q. And that is what you meant by the present power?

A. Yes sir.

Q. Supposing that should be raised nine feet, wouldn't it make a very material difference with the value of the present power?

A. Nine feet more.

Q. Nine feet more?

A. Nine feet would probably be a slight benefit.

Q. Only a slight one?

A. Only a slight one, it would not be sufficient to give that security from temperature which is so desirable.

Q. Have you ever moved on to the Ferguson land, lived on it?

A. No sir.

Q. Never taken possession of it in any way?

438 A. Through an agent, yes sir.

Q. What agent?

A. I believe that there was an arrangement—I don't make all these arrangements myself—I believe there was an arrangement made with the Ferguson heirs, his sons.

Q. That they should occupy it for you?

A. I believe so.

Q. In all these arrangements you have been speaking of, for whom in regard to this water power, and dams, etc., for whom was the work done?

A. You mean was it done for me individually or for the Telluride Power Transmission Company?

Q. Well, was it not known which?

A. No sir.

Q. Don't you know whether you are claiming the right to divert this water and build a dam yourself, or whether you are doing it as agent for some company?

A. I was claiming it under an arrangement that was made, with the understanding that there was a large power here. It isn't even yet determined whether, if we are not permitted to establish a large power here, the company will carry out their arrangements, or will take the matter off from my hands.

Q. Then it is uncertain as yet whose enterprise it is?

A. It is uncertain to that extent.

Q. Is that the same with the Ferguson land the same uncertainty?

A. The Ferguson land belongs to the enterprise and goes with the enterprise.

Q. One way or the other?

A. Whichever way it goes.

Q. You say you did not personally make any arrangements with the Ferguson heirs?

A. No sir; I didn't.

—. I understand your answer to Judge Henderson, that the defendant in the value of the plant, between the present one, you have, and one with a 25-foot dam would be about one a half million?

A. Yes, sir: I went over that——

Q. Well, am I correct as to the amount, that is all?

439 A. I think it was about a million, I think.

Q. About a million?

A. I think the conclusion was that it would cost a half a million, and that the value of the *value of the* development of the 25 would be worth a million and a half.

Q. Then the difference would be about a million?

A. Yes sir.

Q. Then, that the difference between the 25-foot dam and the 85-foot dam would be another million and a half?

A. Approximately.

Q. Making an entire difference of two and a half millions.

A. Approximately.

Q. You say that there is a market for all the power that you can develop there?

A. I think so.

Q. Where is it?

A. In the different mining camps around about.

Q. There are other companys seeking for those investments are there not?

A. I don't know of any.

Q. You don't know of any?

A. No, sir.

Q. Do you know anything about a power at the Jordan?

A. I don't think there is any power there. I don't think that there is 500-horse power to be developed there; at least my engineers examined it very carefully and so reported to me three years ago.

Q. And you don't know then that they are contracting in the mining camps to furnish power?

A. I believe they have never made a contract that is what I am informed.

Mr. HENDERSON: Well, a*n* contract, and furnishing is two *two* different things Judge. I should like to modify that statement, Judge, Harkness, to this extent, that I think there is in the neighborhood of twelve or fifteen hundred horse power on Big Cottonwood that could be used either at Bingham or Mercur.

Q. Do you know an enterprise that is called "Samson's"
440 at *at* Jordan, at the head of the Jordan?

A. I know it very well, sir.

Q. Is that the one you think has no power?

A. I don't think it has to exceed five-hundred-horse power.

Q. Your estimate of the value of the plant and power is based upon the supposition that you can contract it all?

A. That we can sell it all.

Q. Yes, and at a certain rate?

A. Per horse-power, yes sir.

Q. What rate per horse-power do you estimate at?

A. Estimate it at a net value of about thirty dollars.

Q. Over cost, a value over cost thirty dollars?

A. A value over cost, yes sir.

Q. On this ten-thousand-horse power you would have how much net value?

A. Nine-thousand-horse power in the canyon would deliver approximately actual, commercial, of between six and seven, which would be not far from $200,000 a year.

Q. Net profits?

A. Yes sir; that is net profit I figure over and above operating expenses, not including fixed charges.

Q. The estimate of coal which you gave was of the number of tons which you estimate would require to generate the same amount of horse-power?

A. Yes.

Q. Considerable profit in electricity?

A. Not more than in the sale of coal, I believe, sir.

Mr. HARKNESS: I would ask the privilege of my assistant asking a few questions, rather than filter them through me. I am kind of opaque. (No objection.)

Mr. WEDGWOOD:

Q. Mr. Nunn, you were asked a question by Judge Harkness: about a notice that Holbrook put up somewhere, and he asked you if you directed him to put up one, and you said you could not say yes or no, or something like that, and that you made an explanation which was stricken out, about what somebody told you; what did you say to Holbrook about that notice?

441 A. I told Mr. Holbrook that I was advised by the attorneys that I had consulted that there was no authority in law for a notice of any kind either put upon the ground or recorded, but that it could certainly do no harm, and that I had no objection to its going up.

Q. Yes, now what year was that?

A. Now the same, that was in '94.

Q. In '94?

A. Yes sir.

Q. Did you tell him anything about where to put it up?

A. No, I think not. As we drove up and down the canyon we were talking about the different places that looked as though they would be good places to take the water out, and all that was left to Mr. Holbrook to determine in a preliminary way, by surveying and engineering.

Q. Yes; now that was in '94, the first time you ever went up there?

A. That was in '94, the first time I ever was in the canyon.

Q. It was a mere casual, first preliminary ride over the ride to look at it?

A. Yes sir.

Q. And a casual talk of that kind?

A. Yes.

Q. Now, calling your attention to this sixty-foot level,——

A. I wish to explain, Judge——

Q. Yes?

A. That that is a long time back, and the fact that it wasn't an important matter in my mind would show why it did not impress itself upon my mind absolutely. I would not say why I did not say "Why all right you may put up a notice," but I know that it was, that I never regarded it as important, and I do not recollect of having directed the notice to be put up.

Mr. HARKNESS: I move to strike out that latter part, that he never regarded it as important.

The COURT: I think so.

Mr. HENDERSON: Well, that may go out, but the balance of it I insist upon staying.

442 Mr. WEDGWOOD:

Q. Calling your attention now to that sixty-foot level, in the spring of '96 when you went up there, in the early spring of '96, you testified to having seen these plugs set along there on that level, and Judge Harkness has asked you something about that, and about whether it went up to or above Hanging rock, whether they did; what is the fact about that?

A. The fact is that Mr. Suhr ran that line, and that I saw the line as run in the fall of '95, and also saw it several times during '96, in the spring of '96.

Q. Yes, the fall of '95 and '96; now state whether it went up to or above Hanging rock?

A. Mr. Suhr surveyed that a short distance above Hanging rock and Mr. Searle continued it until I instructed him or instructed Cramer to have him survey the upper contour line first, and before the entire work was completed he was recalled to go to Telluride.

Q. Now, about work in '96, or since '96, Judge Harkness asked you about work that was done for you some time in '96, and then he skipped the latter part of '96 and over to '97, and asked you what was done in '97 up in that basin. Now I want to continue that and fill that link between, and ask you what was done after the time that he called your attention to, '96 up to '97?

A. Well, the two abutments called Hanging rock were being prepared for receiving masonry; there was quite a good deal of work put upon the one on the south side.

Redirect examination:

Mr. HENDERSON: Did you ever see this?

A. I saw men working there. I was never on that side of the river, because as soon as our trouble commenced we stopped work, and we haven't worked since.

Q. Well, you saw the men over there at work?

A. I saw the men over there and saw where they were working.

Q. Now what was it they were doing?

443 A. They were clearing off the abutment and preparing it to receive the masonry; simply cutting down really to find out to what extent it was perfectly solid and reliable. It was practically exploring work, the same as the exploring of the bottom, only that this would have been permanent, whenever we construct a dam or build masonry against it. Naturally on the outside it is cracked and chilled.

Q. Yes, and you was cutting down to the solid rock?

A. For a time it was a question as to whether or not there were seams in those abutments which would allow the water to get out.

It took a good deal of time to explore them to ascertain whether they were living rock abutments or whether it was something that would crumble away; and that work was being done from early spring until the time that the first trouble come on.

Q. Now you talked about some pit holes dug right at or near these Hanging rocks: now was there other pit holes during that time up around within this basin?

A. Yes, sir; I had Mr. Madden explore the same ground to determine the amount of wash that could be obtained for sluicing, to fill up the bed of the canyon.

Q. Well, now; how was that work done?

A. Simply digging into the side hill to determine.

Q. Just digging pit holes in there to see what the dirt was?

A. Just going right in to see the amount of dirt that could be washed.

Q. I desire to ask you what your *at*tention was to use that land of Ferguson's for, when you bought it, or when you contracted for it?

A. It was for reservoir purposes, of course.

Mr. HARKNESS: I think I will make an objection if the court please, the same as previously.

The COURT: Upon the theory that the court has pursued
444 here, that it showed the intention. It will be admitted.

Mr. HARKNESS: Note an exception.

Mr. HENDERSON:

Q. What did you buy it for?

A. Bought it for reservoir purposes; bought it because it was the only individual right inside of our reservoir at all, and it wasn't a question as to whether we could get the absolute title. We wanted to be able to build that without damaging his possessory rights or any other rights that he might have.

Q. The other lands all around it were unoccupied public domain, were they?

A. That was my understanding.

Q. Well, you have never learned anything to the contrary have you?

A. I have not, no sir.

Recross-examination by Mr. HARKNESS:

Q. Do you know of any work being done down where the Holbrook notice was posted if it was posted a little above the bridge?

A. There was some work there in—a little work done there in 1894; the brush was cut out, and I think M. R. Thayer worked three or four months there in preparing it for grading. That was before I looked it over in '95.

Q. Did Mr. Searle stop running the line of posts around the sixty-foot level by your direction?

A. I directed Mr. Cramer to have the upper line run first. I suppose that that was the cause of his being stopped.

Q. You were examined as a witness here in court, about a year ago now, were you not?

A. Yes sir.

Q. Before I refer to this I will ask you whether you did not say to Mr. Searle and Mr. Cramer that a certain notice, as to that, that was a mistake?

A. At what time do you mean?

Q. It was along in April '96 I think at the Middle rock.

A. I remember telling Mr. Cramer that a notice that he had put up was a mistake.

445 Q. It was from that notice that Searle was running the level, was it not?

A. I don't think so.

Mr. HENDERSON: From what?

Mr. HARKNESS:

Q. Wasn't that notice on the sixty-foot level?

A. I think there was a board with the notice on set up against a rock within a few feet of the sixty-foot level when I returned on one of my trips.

Q. Didn't you say to Mr. Searle and to Mr. Cramer that that notice was a mistake?

A. I don't think I spoke to Mr. Searle at all.

Q. Did you tell Mr. Cramer that?

A. I think so; I think it was a mistake.

Q. What did you say to him about it?

A. I don't remember.

Q. Did you say this: "Leave this right where it is, but it is an error, it leaves no water for reservoir purposes: put in another stake on the eighty-five-foot level, or twenty-five feet above"?

A. I don't think I did, Judge; I may have done so. The only reason why I think I did not is because while I regarded the matter as entirely immaterial in every other way whatever, the putting of the notice up, I do not think I directed any notice.

Q. You don't think you so stated on the other trial?

A. I don't think so. I don't know; it is a matter, I say, it isn't consistent with what I state now.

Q. Well no matter, I am not asking that; you don't think you said it. Well, was it in fact a mistake, having a notice on the sixty-foot level?

A. Well read me the notice and I will tell you.

Q. Well, I haven't got it?

A. I think that was evidence I think it is in the transcript.

Q. Well, was it a mistake, putting any notice on the sixty-
446 foot level, that is what I want, whether that was your claim at that time?

A. I don't think it was any harm or any good, I think that the whole line may have been put by notice.

Q. Well, was you then claiming any right to raise the water to the sixty-foot level?

A. I was always claiming the right to raise the water to the

sixty-foot level for the purpose of putting it in the ditch, and twenty-five feet above that for reservoir purposes.

Q. Then the sixty-foot level wasn't the one that you was claiming the right to raise the water to?

A. I was claiming the right to raise it to that for a waterway, and the twenty-five feet above that for a reservoir.

Q. And then it was true that if a notice was there claiming the right to raise the water to that level it was an error?

Mr. HENDERSON: No, he didn't say that; that is based upon a false assumption. The witness says he claimed it to the 60-foot level, and 25 feet above it, so that in effect he says it wasn't a mistake, but it wasn't the whole truth; in that sense it was a mistake.

The COURT: The court understands the enquiry was as to the notice, claiming the right to raise the water to the sixty-foot level.

Mr. HARKNESS: Yes.

Mr. HENDERSON: And it implied that if he only claimed water to that level it was a mistake, but that was a notice claiming water to that level. It was right so far as it went.

Mr. HARKNESS: Well, he repeated the question, if there was a notice there claiming the right to raise the water to the sixty-foot level it was right—it was a mistake.

A. Do you put that as a question, or make the statement?

Q. Yes, to put it as the question?

A. It was not a mistake that I wanted to raise the water
447 to the sixty-foot level and it certainly wasn't a mistake that I wanted to raise it twenty-five feet above sixty feet.

Q. Then you didn't intend to limit your right by the sixty-foot level?

A. Never, never.

Q. Never; then if the notice so limited it it was wrong?

A. If the notice so limited it was wrong.

Q. At what time in 1896 did you see any men doing work on the abutments at Hanging rock, on the two rocks?

A. I should say it was in May and June, but of that I am not sure.

Q. How many men did you see at work there?

A. I think there were three or four. Only a few could be at work there, because it was a question of examination.

Q. Well, how long did you know that they worked there?

A. I think they worked there several months.

Q. Did you know that; did you see them working there two or three months?

A. I saw them there at more than one of my trips in, and I inquired from time to time the condition of the work.

Q. How many trips did you make while they were at work there?

A. Well, I said I made two; whether it was more than two or not, I have the impression that it was.

Q. In what months?

A. I said that I believed it was in May and June particularly.

Q. And each trip you saw men at work there on those rocks?

A. I am sure I saw men more than once.

Q. And do you remember how many men?

A. I said probably four. That is the way men work usually on work of that kind.

Q. Probably four?

A. Three or four.

Q. That doesn't answer whether you remember the number or not.

A. No, I do not; it is a too casual matter for me to remember, these minute details; I simply remember there were men working there for the purpose of exploring and preparing the face of
448 that abutment.

Q. Now, you think that was in May or June or perhaps both months?

A. I think so; may have been in March or April.

Q. Well, can you now say any men worked there in March or April?

A. No sir; I say my impression is that it was May or June.

Mr. HARKNESS: I ask permission to have Mr. Wedgwood ask a few questions.

Mr. HENDERSON: No objection.

Mr. WEDGWOOD:

Q. I would like to do it by and by; there is one place where I lost track of. I will just ask one question though now. Mr. Nunn you was present here on this trial on the trial?

A. Last time, yes, sir.

Q. Yes; these familiar facts, now you testified I believe upon the witness stand yourself?

A. Yes, sir; I was on the stand.

Q. Now, in that testimony that you gave there did you assign as a reason for a twenty-five foot head of water a question of temperature, or a question of ice?

A. I don't know whether I did or not.

Q. Well, do you know?

A. Wouldn't it be rather remarkable if I remembered my testimony?

Q. I don't think so; I think that where a man bases an allegation, necessity for a certain thing, upon a proposition of that kind, Mr. Nunn, I think that he should surely remember whether he based it a year ago that way or not. Are you prepared to say that there is any testimony whatever in that record showing or tending to show that you claimed any head of twenty-five feet of water on account of temperature of the water?

A. I have not looked at that testimony since it was given; and I am not prepared to say anything about it. I am prepared to state that the same state of facts which existed then exist now, and
449 that as I testified to the truth then I unquestionably will testify to the same facts, if asked me now. As to whether I

testified to anything you ask or not I certainly do not know. I have no recollection, and do not propose to assume to harmonize my statements now with my statements then. I propose to testify to the truth as it stands.

Q. We will just leave that for a minute; your recollection is pretty good, isn't it Mr. Nunn?

A. Fairly on matters that I consider important; never on matters that are unimportant.

Q. On important matters your testimony would be just the same as it was then?

A. On important matters I think my recollection is fairly good, not specially good.

Q. Well, you consider these of course important matters?

A. What are these?

Q. Well you consider you have a fair memory?

A. Nothing extraordinary either good or bad.

Q. Well it is good enough to remember facts so as to testify to the same facts one year from the date of testimony, is it not?

A. That depends upon whether they are facts which are impressed upon my mind as important ones.

Q. Well, are facts in relation to this claim of right to hold a twenty-five — head of water important, Mr. Nunn?

A. Well, the majority of your questions I deem not——

Q. Well, I ask you the question?

A. Important; but the fact is certainly important.

Q. Read him the question Mr. Reporter.

(Question read.)

The COURT: Do you understand the question, Mr. Nunn?

A. Some of them are, and some of them are not.

Mr. WEDGWOOD:

Q. Now, I will ask you further is the fact *of* alleged fact that you now claim that a twenty-five foot head of water is necessary to you on account of temperature and keeping out mush ice and small ice important?

A. I h-ve not fixed——

450 Q. Just answer that question, please?

The COURT: You can answer the question yes or no, and then explain, Mr. Nunn?

A. If your honor please, he has put a question there——

The COURT: Read the question Mr. Reporter.

Question read.

A. If your honor please, we haven't claimed that, and he puts that in there to make me falsify.

Mr. WEDGWOOD: I do nothing of the kind.

A. A witness should be protected as well as the attorney.

The COURT: Certainly sir. In your direct examination there was certainly something in regard to the temperature and in regard to mush ice, something of that kind.

A. And I said a reasonable amount of storage of water above the mouth was essential, absolutely essential.

Mr. WEDGWOOD:

Q. Well, let's try and get it to suit, Mr. Nunn; I am willing to be accom-odating to you in this matter. Do you mean to be understood now as saying that any depth of water above the point where the water is taken out is necessary to the success of your enterprise?

A. Water is necessary above, is that what——

Q. Yes.

The COURT: Above the point where it is taken out?

A. Yes sir.

Mr. WEDGWOOD: Now, that is one simple question?

A. Yes sir.

Q. Is one of the elements of that necessary on account of temperature?

A. Yes sir.

Q. And that is an important element?

A. Very.

Q. In your testimony as detailed here today, have you endeavored to testify that it was an important element?

A. Yes sir.

Mr. HENDERSON: Why, he has just said so now.

Mr. WEDGWOOD: Well, I know, but in my dull way I want to be sure about it.

451 Q. Now I will ask you, Mr. Nunn, if you are prepared to say that you testified to that in any way, if that was even hinted at in your testimony or the testimony of any other witness on the trial a year ago on the other case?

Mr. HENDERSON: I object to it, if the court please. There isn't anything—suppose he didn't and suppose he did, if he did testify different then they should put a direct question to him if it purposes to impeach him; if he didn't testify to it they must show the condition they would require him to testify. It is true if when a man stands by *by* after an accusation is made against him and says nothing he is bound by it. If a witness is on the stand and is asked a question and makes no reply or makes a false reply it may be given in evidence against him, but if he takes the stand and isn't asked the question at all it isn't testimony against him. Let them show the conditions that surrounded him first before they ask that question.

Mr. WEDGWOOD: It isn't asked for impeachment at all. It is bearing on his credibility.

Argued to the court by respective counsel.

The COURT: It is clearly improper as to an impeaching question; as to the propriety of its admissibility otherwise as a circumstance, I think that the jury ought to have it and that the witness should answer the question; not as impeachment. Answer the question.

Mr. HENDERSON: Give us an exception.

A. What is the question?

Question read.

Mr. BAILEY: Upon the further ground that there is no testimony

to show that the witness knows whether he did or not. They can't ask a witness and force him to answer——

The COURT: I think that is correct, Judge.

452 Mr. HENDERSON: I think the witness has already stated that he did not know whether he did or not.

Mr. WEDGWOOD:

Q. Well, I will ask you whether you know whether you testified to anything of that kind?

A. I do not; haven't burdened myself with the testimony.

Q. Well, we will reach another question; now; Mr. Nunn, that perhaps you will burden yourself with; as I understand you, you testified in your direct examination in answer to Judge Henderson that you decided upon the erection of building of this enterprise in the fall of '95; am I right about that?

A. I did not say that I did. I said that we did, and I mentioned——

Q. (Int.) You and the two men that were with you?

A. The three men that were with me.

Q. Mr. Cramer and the attorney; did I understand you to say that, that you went on and told how the enterprise was to be built in regard to that dam that you decided there?

A. No sir, I did not say that I went on and told how. I said that there were plans discussed.

Q. Let me ask you, not to make any mistake; let me go over this Mr. Nunn, and you say whether you testified to it, I don't want to put any words in your mouth that don't belong there; didn't you testify to Judge Henderson that you decided there that that would be an excavation, and that the dam, or the work, constructed down the creek quite a ways, of masonry perhaps six or eight feet high, a toe put in there, and then that would be filled up, back with sedementary deposit from the side of the hills or somewhere until it became perfectly packed and tight, the same as hydraulic mining had demonstrated would be?

A. Yes sir.

Q. And then after that had become that way that you would build another toe further up the stream, and fill in behind that the same way, am I correct?

453 A. That is the plan, you had read one word that means a conclusion.

Q. Well, I cannot use the exact language, Mr. Nunn; that was the plan discussed?

A. Yes sir.

Q. And so on until you reach the height of the dam?

A. Yes sir.

Q. Now, did I understand you to say that that was the plan agreed upon there?

A. No sir; I did not say I agreed; I said that was the plan proposed.

Q. Well, didn't you convey the idea in your testimony and intend to, that that was the plan decided upon there?

A. It was the plan proposed, and I said in my testimony subject to the modification of the engineers.

Q. Well, that was decided on by you was it then, at that time?

A. An absolute decision, no; it wasn't the time for an absolute decision.

Q. Wasn't?

A. It was the plan that was talked of and was favored, and I always favored it.

Mr. HENDERSON: Mr. Wedgwood: Let me call your attention. He testified that at that time a general idea of raising sixty foot and a dam on top of it was there determined upon.

Mr. WEDGWOOD: Judge Henderson, I think the witness can take care of himself very nicely.

Mr. HENDERSON: Well, I know, but I am here to help take care of him.

Mr. WEDGWOOD: Yes, I understand that very well, Judge.

Mr. HENDERSON: That is what I am here for, and I have the right if you are misleading yourself, or if he is being misled on the testimony that you are undertaking to question him——

Mr. WEDGWOOD:

Q. Now, was there any determination arrived at that time?

A. Exact determination, no, sir.

Q. No determination arrived at well, was that plan ever changed?

454 A. It wasn't a plan; plans grow out of drafting and a great deal of exact work; that was not put in that form.

Q. Well, was that scheme ever changed, Mr. Nunn?

A. That scheme, no sir, not by me; that is the scheme that I have in mind now, if I permitted to——

Q. Your mind on that ha*nd*'t changed at all?

A. My mind on that hasn't changed at all.

Q. And your mind has been in that same condition ever since that time?

A. So far as that scheme is concerned my mind has always been and is now as it was, to fill up the bed of the canyon——

Q. Now don't go over that again, Mr. Nunn.

Mr. HENDERSON: Yes, yes, just a moment. Now let him go over it.

The COURT: One at a time gentlemen.

Mr. HENDERSON: I object to his stopping the witness.

The COURT: Well, you can redirect again for any explanation.

Mr. HENDERSON: Yes, but I submit that counsel have no right to stop the witness right in the middle of his answer.

The COURT: No, that is true, unless he is beyond the answer to the question.

Mr HENDERSON: No, unless he is going beyond the answer and then it might be stricken out Now just read the question and answer. (Question and answer read.)

Mr. WEDGWOOD: Now I will cut right off here for the purpose of

having a fair field for myself and Judge Henderson. As I understand the ruling of the court is that he answer the questions propounded to him.

The COURT: Yes sir.

Mr. WEDGWOOD: And then after he answers the question if it requires an explanation he has a right to do so.

The COURT: Yes sir.

Mr. WEDGWOOD: There is one or two direct questions that I would like to ask and is he has any explanation to make he
455 can make them later.

Mr. HENDERSON: Yes, I accede to it, and I submit that the rule is equally permissible if when he is answering *and* a question and is cut off as to this scheme which is so broad that he has a right to finish.

The COURT: Proceed with that understanding.

Mr. WEDGWOOD:

Q. Now, at that time, Mr. Nunn, at the time you and the president of the company and the attorney and the engineer were there did you amongst you agree upon a plan or scheme, subject to change?

A. Please say which, plan or scheme, the two are inconsistent.

Q. Well, what did you do there?

A. We drove down all in one day, and stopped at the Hanging rock, after passing through the flat country above, and looked over the ground and soil and discussed several propositions for the putting in of the dam, and one was a simple solid masonry work without any reference to the filling back. The other was the plan which I have always considered the most feasible.

Q. Well, just leave that out; just tell what was done there; don't want what you consider now.

A. The filling up of the bed of the canyon by the sluicing in the sides. The conclusion was that there would be a dam of one kind or the other at or near that point between Middle rock and Hanging rock. If my plan was adopted I was of the opinion that Middle rock was a better place than Hanging rock and I think all the others thought that Hanging rock was the better place for the dam.

Q. Is that all?

A. That is what I remember at the present time.

Q. Now didn't you testify in regard to that time this morning in answer to Judge Henderson something about putting toes in?

A. Certainly.

456 Q. Now, what did you testify in regard to that this morning in connection with that event?

A. He asked me what my plan of construction would be.

Q. Your plan?

A. Yes, sir; so I understood it, and I illustrated what my plan of construction would be.

Q. And that was the toes that we have spoke of here?

A. Yes sir.

Q. Now after that at any time was there any other plan different from this, your idea of constructing that dam adopted?

when you four people were up there when you testified that
459 the completion of the work was determined upon, and the carrying out of the general scheme; state what you meant and what you do mean by saying that the general scheme of carrying out the enterprise was there determined upon, and what that included, or I will ask you in another way, did that include the detail work of carrying out the scheme?

Mr. WEDGWOOD: Object to it as not proper redirect examination; he has been all over that thing.

The COURT: Answer the question.

Mr. HENDERSON:

Q. Did the adoption of the scheme at that time, in October, 1895, when you four people were up there, and the determination to go forward and complete the scheme, did that include the detail work of carrying it out?

A. Why such a proposition would be absolutely absurd. There was a great industry to be put in, and the plans, final steps approved by the State engineer.

Q. Yes.

A. And all that was determined upon was, this is a good proposition, approximately so many thousand horse-power can be obtained; there is a fair market, we will put it in; a few suggestions of the kind of a dam we would put in, one suggesting a solid masonry and an arch above the two abutments, and my plan of filling up the canyon. Now, that was the extent of it. The idea of sitting in a buggy or walking along the water in the canyon and entering into details of proper engineering is simply too absurd to be considered for a moment.

Q. In other words you adopted the enterprise, but you did not undertake to adopt the means, by which it should be carried out, or the details of it?

A. So far as my judgment went it was to fill up the canyon for the purpose of raising the water to that sixty-foot level.

Q. About all that was done there was a mere discussion?

460 A. All that was done there was a mere discussion of course.

Recross-examination by Mr. WEDGWOOD:

Q. Just one question, up to September 14th, you never had decided, on any—September 14, '96, you never had decided on anything?

A. The plan has not been adopted to the present time, and will not until our rights are determined.

Q. There has been nothing whatever adopted, no bed rock found, no plans laid out to estimate its costs, or nothing by which the matter could be intelligently followed out up to the present time?

A. There has been plans of the cost sent in to the board of directors, estimating the plant's cost, sent in to the board of directors.

Q. Yes, but have they been estimated on any data obtained by research?

A. Yes, upon a *a* great deal of data, but not on exact data as to bed rock, no, sir?

Q. They have been based on nothing except what has been testified to in this suit?

A. Yes.

Q. Well, what else?

A. I don't carry my *hold* corps of engineers in my pocket.

Q. No, and so far as you know there has been nothing else.

A. I know that there has been, but so far as my knowing, I am not in possession of those details.

Q. You are not in possession of anything further to testify to?

A. I have nothing further to testify to that I recollect.

Q. Now just one question about this Hanging rock: when did you say that you went to work on Hanging rock, your people?

A. What was the question?

Q. When did you say your people went to work on Hanging rock?

461 A. I said I thought it was in May or June.

Q. In May or June, which side of the river did you go to work on?

A. The south side.

Q. The south side of the river?

A. Yes.

Q. That is the same side of the river the railroad men went to work on?

A. The same side as they went to work on a month or two afterwards, yes sir.

Q. Wasn't they at work on *the* grading at the same time you went to work on there?

A. No sir.

Q. You are sure of that?

A. I am sure that the first time I saw the men there, the first time I had the men instructed to look into that and see what it was——

Mr. HENDERSON (int.): Mr. Wedgwood, I think the correspondence will show that.

Mr. WEDGWOOD: The time that they went to work there?

Mr. HENDERSON: No, not the time that they went to work there, but which was first will be shown in the correspondence.

Mr. WEDGWOOD: You wasn't there only a short time anyway?

A. No, I was not.

Redirect examination by Mr. HENDERSON:

Q. Mr. Nunn, you say that you don't—Mr. Wedgwood asked you this question if the engineers and the board of directors who had made estimates of cost had any data about that that has not been given here, and you stated that they did have some, but you didn't know what. I ask you if you don't know now, upon being re-

minded, that they did have the cost of masonry work, and took into consideration the cost of moving the earth up there, the cost of hauling it there, and the cost of labor what it would cost there, and such usual data as they had?

462 A. I have already stated they had the estimates and specifications of two kind of structures, the one that I recommended and the one recommended by others as the solid masonry.

Q. Oh, yes, I didn't understand that you stated that they had specifications?

A. Yes.

Q. They had the two?

A. They had the two, and they were sent there for them to finance upon.

Adjournment taken until Friday April 22, at 9.30 a. m.

Resuming session, Friday.

Mr. HENDERSON: I wanted to recall Mr. Nunn for one question. It is admitted that L. L. Nunn is a native-born citizen of the United States.

Now if the court please, I want to put in, so that the record will show it now, the proof of the appeal of that case from the supreme court of this State.

The COURT: To the Supreme Court of the United States?

Mr. HENDERSON: To the Supreme Court of the United States, and I have it here. The fact is that the record is made up just ready to send to Washington, and Mr. Brown when he came down brought it down here before sending it, and it contains the proof, it is the papers just ready for transportation, and instead of making copies, we didn't have time to make the copies, but I have the originals, and I want to offer them in evidence and withdraw them, and so far as they want copies we will make them, whatever is wanted; it consists the proof will of the petition for appeal, and the allowance of the appeal by the chief justice of this State.

Mr. HARKNESS: Petition for writ of error?

Mr. HENDERSON: Yes, petition for writ of error, and the allowance of the writ of error to the Supreme Court of the United States, and the writ of error, and the bond on supersedeas. The petition for the writ of error is dated the first of March. The writ

463 was dated, issued by the clerk of the United States circuit and district of the eighth circuit and district of Utah on the 1st day of March, and allowed on that date by Charles S. Zane, chief justice. The assignments of error dates, I believe, March 4th, the citation issued and signed by Charles S. Zane, chief justice of the State of Utah, issued on the 1st day of March, and served and filed on the 4th of March, the bond on supersedeas dated and filed on the 1st day of March, and the certificate of the clerk of the supreme court of the State of Utah, and I will just read that in full and let it be taken by the stenographer:

"UNITED STATES OF AMERICA.

STATE OF UTAH, } ss:
County of Salt Lake, }

I, Lilburn P. Palmer, clerk of the supreme court of Utah, in pursuance of the attached writ of error, do return annexed hereto and to said writ the original transcript of the record and proceedings, assignments of error, together with a copy of the opinion, petition for writ of error, order granting writ of error, and bond, all in and of said court and cause, to the Supreme Court of the United States; and I further certify that said copy of said opinion, petition for writ of error, order granting writ of error, and bond, is a full, true, and correct copy of the several originals thereof on file and of record in my office.

In witness whereof I hereunto set my hand and affix the seal of the supreme court this 10th day of March, A. D. 1898.

LILBURN P. PALMER."

Calling attention to the bond, it is signed by sureties whose justification——

The COURT (int.): Well, that is presumed to be arranged there by that court, is it not, the bonds?

464 Mr. HENDERSON: Yes, that is true, yes, they don't have to be passed on here, but it is filed in the usual form. Now Judge, do you care for copies of these to be made, or read?

Mr. HARKNESS: I would like a copy of some of them. I will look at them and tell you what. I would like a copy of the petition for the writ; its allowance and the writ; assignments of error I don't care anything about, nor the bond.

Mr. HENDERSON: Well, I will have that done during the day to-day or this evening, Judge, and put them in. Now if the court please we put in the record of a deed yesterday and inquiry was made if we had the original, and we have found the original and would like to put that in.

The COURT: Substituting that in lieu of the copy?

Mr. HENDERSON: How was that?

The COURT: You say there was a copy of record of a deed?

Mr. HENDERSON: No, we only read the record of the deed and stated what it was.

The COURT: And now the original;

Mr. HENDERSON: And now the original; it is very short and I will read it in the record.

"*Warranty Deed.*

William W. Ferguson, unmarried, grantor, of the toll-gate, Provo canyon, Utah county, Utah, hereby conveys and warrants to L. L. Nunn, grantee, of Telluride, Colorado, for the sum of twenty-five hundred dollars, the following-described tract of land, in Provo canyon, Utah county, State of Utah: one hundred and sixty acres of land, together with all the appurtenances thereun-o belonging.

commonly known as the toll-gate, the same being where the said grantor resides. Said land when surveyed will be so far as can be ascertained, a part of the west half of the southwest quarter of section 26, and the northeast quarter of the southwest quarter
465 and the northwest quarter of the southeast quarter of section 26, township 5 south range 3 east, Salt Lake meridian; and the southeast quarter of the southeast quarter of section 27 in said township.

Witness the hand of said grantor this 26th day of December, 1896.

WILLIAM W. FERGUSON.

Signed in the presence of
SAMUEL A. KING.
JACOB EVANS."

The acknowledgment is before Jacob Evans, notary public, and is dated the 26th day of December and recorded in Book 38 of Deeds, page 129.

Mr. HARKNESS: It is a substitution from yesterday, and of course subject to the same objection.

The COURT: Yes, and same ruling of the court.

P. N. NUNN, called and sworn for the defendants:

Examined by Mr. HENDERSON:

Q. Where do you live, Mr. Nunn?
A. Telluride, Colorado.
Q. Do you know Mr. L. L. Nunn?
A. I do.
Q. What relation is he to you, if any?
A. A brother.
Q. Do you know the Telluride Power Transmission Company?
A. I do.
Q. Where is that located?
A. Its main works are at Telluride, Colorado. It has works here and an office in Cleveland, Ohio.
Q. Have you any connection with that company?
A. I have.
Q. What is it?
A. I hold the position of chief engineer.
Q. How long have you held it?
A. About three years.
Q. Have you been connected in any way with the Utah work?
A. I have.
Q. When did your connection with that work commence?
A. In the fall of 1894, October.
Q. Had you ever been in Utah before?
A. Well, I can't say; I believe I had, once.
466 Q. Well, have you ever been at Provo?
A. But I had never stopped here.

Q. No, you have never been in Utah to stop?
A. No.
Q. Or to be engaged in business?
A. No.
Q. Now, at what time in '94, November did you say?
A. October.
Q. October?
A. October and November.
Q. And did you come here then?
A. I did.
Q. How did you come, how did it happen that you came here?
A. I came under instructions from our general manager, and came in company with Mr. Cramer, our hydraulic engineer, to examine, make a preliminary examination and report upon the water power in Provo canyon.
Q. You hear- L. L. Nunn's testimony here, did you?
A. I think so, heard part of it.
Q. Did you hear the statement in relation to the time when he, in your company, together with Mr. Campbell went from Park City and came down that way?
A. I did.
Q. Was that the time that you first came?
A. No sir.
Q. Oh, it was before that?
A. Yes sir.
Q. How long before that?
A. Just about a year before that.
Q. Just about a year before that?
A. Yes.
Q. That was in '95, and you was here in '94?
A. Yes sir.
Q. Now, just state what you did the first time you came here?
A. We first made a trip up the canyon, driving from the mouth to a point some distance above the Ferguson place, making the first general examination of the canyon with reference to its water power, the first time that either Mr. Cramer or I had ever seen the canyon. We examined it specially with reference to grade, contour, favorable or unfavorable to canal as against flume, as to the length of either that would be required, the volume of water
467 and the amount of head obtainable, as determining the amount of water; also as to the feasibility of increasing head by any means beyond that which has been suggested by previous reports of the probable head, and the opportunity of increasing volume by reservoirs.
Q. How long were you here at that time?
A. About two weeks.
Q. And did you visit the canyon every day?
A. Nearly, I don't think I did every day.
Q. Was any work done or started at that time?
A. When we arrived in the canyon we found Mr. Matthis pursuing his work; I believed it continued during the greater part of the

time I was here. Mr. Cramer devoted himself primarily to a closer examination of the ground, using instruments somewhat but not in an orderly manner specially, and reporting what he found as to the elevations of different flats or terraces upon the north side of the river.

Q. How many men did Mr. Matthis have at work there with him?

A. I should say six; although I don't know exactly.

Q. And were they there during the time you was there?

A. I think so during the greater part of the time.

Q. Yes; you made the examination that you have mentioned here, did you, you and Mr. Cramer?

A. We did.

Q. And did you go back then to Telluride?

A. I did.

Q. Did you report what you found?

A. I did.

Q. Now, Mr. Nunn, state if at that time you discovered or noticed the bench or place where what has been known since as the sixty-foot level was afterwards run?

A. Yes, that was noticed in connection with other benches which didn't come within that alignment, and it was our judgment in the first drive up through the canyon that there was a line of benches upon that level which correspond sufficiently close in elevation to permit of a ditch or canal rather than a flume. It was the
468 opinion *was* expressed however, and entertained in some degree by us all, that there was a possibility at that time to use a higher level, and during this trip Mr. Cramer did sufficient work to demonstrate that that wasn't feasible, and it was apparent to me before I left that the only feasible plan for a successful plant with reasonable cost was the use of a canal, and that the only place in which a canal could be built, the only elevation of a canal would be along that line of benches which has since been marked by what is known as the Suhr or sixty-foot level.

Q. Did you report all this back to the company?

A. I did, to the general manager, Moore, in reference to the business.

Q. Now, when did you come here again?

A. I believe the 12th of October, the following year.

Q. That was in 1895?

A. Yes sir.

Q. Now was that the time when you came with those four parties?

A. Oh, no, that was a couple of weeks before; the party came about the 21st, I believe.

Q. And did you visit the canyon at that visit?

A. I did.

Q. How long was you here?

A. Oh, four or five days.

Q. Was you in the canyon every day?

A. I believe so.

Q. Now, Mr. Nunn, just tell what was going on at that time in the canyon.

A. The instructions given to the two engineers upon the ground was in insistance to run such preliminary level lines and transit lines if necessary, as to demonstrate the accuracy of the theory which had been held at the time of the previous report; not only demonstrate its accuracy but demonstrate the impracticability of any other method; that is the instructions also included the preliminary surveys for the temporary canal or flumes whichever might be found most feasible for the development of *sa* small or temporary
469 power, made necessary by the permanent work, as designed and reported upon the previous year.

Q. Yes.

A. I believe that Mr. Cramer put a couple of days and I did a few days before Mr. Cramer and Mr. Suhr both, so that comparatively little work had been done up to that time although during the intervening year Mr. Thayer and several other men most of the time had been engaged in clearing brush, which was very thick, making it possible to tell anything about the country with an instrument along those lines where we would be apt to——

Mr. HARKNESS: One moment, do you know that Mr. Thayer did it?

A. Do I know that Mr. Thayer did it?

Q. Yes.

A. I know that it was done within that year, and I know that Mr. Thayer was paid.

Mr. HENDERSON:

Q. And you saw this work?

A. And I saw this work.

Q. When you came here: go on and describe the work, what you saw?

A. Around the county bridge there had been quite a large amount of brush cleared away and stacked up and some of it burned, and some cleared also at a point, well, I am not sure in regard to that, but I believe that there was some cleared around the Hanging rock, as I remember it was fairly clear; it was principally done however upon the lower point which had been advised by Mr. Cramer the preceding year as a probable place for temporary work.

Q. Now, at that time what were the—when you got here and during the three four or five days that you were here, what were the engineers doing Mr. Cramer and Mr. Suhr?

A. Well, Mr. Cramer was still studying the groun- especially with reference to a dam site and reservoir, and elevations, getting a general idea of the capacity of such a reservoir, and Mr. Suhr was engaged in running the preliminary level lines which I have
470 spoke of, the level lines from in general the Hanging rock to Mr. Thayer's beginning in there as different ones of them did at the river and extending down the canyon sufficiently far to demonstrate the point in question. He was engaged during that time just

when, during the week or ten days, week I think, I can't say, in running what has since been known as the sixty-foot level.

Q. Yes.

A. As I remember that had been partly staked before I left at that time.

Q. Did you go up to that level and examine the work that he was doing?

A. I did.

Q. How was it being done?

A. I have no clear recollection of how he was doing the work upon that level at that trip. A few weeks later I was there and remember distinctly about that visit.

Q. Well he was at work on that level then?

A. He was.

Q. At this first trip?

A. Yes.

Q. Now, how many men were engaged there in the *the* canyon in connection with your enterprise at that time?

A. I don't remember except as I saw them around at noon time. I should say ten.

Q. State whether a camp was being maintained there?

A. Not at this time.

Q. Not at that time; you wasn't having a camp up there; went up every day?

A. They were boarding with Mr. Thayer, I believe. I think possibly they had a tent there and were sleeping in the tent.

Q. Now, was the next time that you were there the time you came down through the canyon from the upper end?

A. It was.

Q. You recollect that time, do you?

A. I believe that was the 21st of October.

Q. The parties named here by Mr. L. L. Nunn were with you, were they?

A. Yes.

Q. And did you come down, did you stop when you got down to Hanging rock?

471 A. We stopped a number of times through the canyon. We stopped there.

Q. Yes, and state whether your party spent that day substantially in the canyon?

A. We spent all the afternoon and a part of the morning in the canyon. A large per cent. of it was spent in *in* the neighborhood of the Hanging rock.

Q. Yes.

A. We walked up on to the rock if I remember rightly and down around the sides, and examined the different points, and discussed the feasibility of the scheme as reported.

Q. Well, now, did you observe at that time anything about what was going on, or what had been done at the sixty-foot level?

A. I can't be sure whether it was at this trip or the trip made a

week later on the 28th, but it is my impression that it was at this time.

Q. Yes, then state what it was?

A. The line had been cleared sufficiently from brush to enable the use of an instrument, the level, and surveyors' plugs had been placed on that line. The line had been flagged sufficiently so that we had no difficulty in following it with the eye as far as we could see, until the line disappeared around the curve of *of* the hills. The flags were pieces of red cloth, red muslin, if I remember correctly, six inches to a foot wide, and several feet long, tied in a knot around the end of a piece of brush or stake from four or five or seven or eight feet high, and stuck down in the immediate neighborhood of these plugs so as to indicate where they were.

Q. Yes, now these plugs, did they extend up to Hanging rock?

A. I believe they extended; yes they extended up to Hanging rock; I believe we noticed one beyond, above Hanging rock; the flags I don't think did, quite, since the earth is very clear, the ground was clear up around the Hanging rock for a short distance, very little brush.

Q. Was anything done there by your party on that day with reference to determining whether, or in relation to the enterprise, as to whether it should be carried through or not?

472 A. Well, I have heard it said that it was determined there. As engineer and not one of the parties, I don't remember that it was stated in so many words "Now this will go," but——

Mr. HARKNESS: One moment, I move to strike out that he heard it said that it was determined.

The COURT: I think that may go out?

Mr. HENDERSON: Yes, that may go out.

Q. You aren't an officer of the company; you are an employé of the company?

A. I am; I remember that it was determined at that time that it was a feasible, and good scheme.

Q. What was the scheme as to the level at which the water should be taken out?

A. The level was to be what has since been known as the sixty-foot level, and stakes then upon the ground as being the only level feasible for canal use, and the level of the water was to be approximately 25 feet higher to permit of the storage of that amount of water. Discussion was largely along the feasibility of the construction of the retaining wall, and the discussion of the theory advanced and discussed there was a method of raising the bed of the river sufficiently to get the water upon this level without having what should be termed a dam.

Q. Mr. Nunn, could you in just a moment and with a few lines there sketch on that board the relative position there of the bed of the stream and this level up along there?

A. I will try; I am not an artist by any means. I can't handle my right arm at that elevation sufficiently well to do any work at all.

A. The sixty-foot level comes along at a point——

The COURT: Just stand around so that the jury can see.

A. The Hanging rock, the lower abutment comes up to a point a couple of feet, I should say lower than the line of the Suhr
473 line, sixty-foot line, there, continues on above, how much I don't remember now, and the question discussed at that time was to how raise the bed of the river sufficiently to get water upon that level, and permit of a dam some 25 feet or 30 feet higher than that. The discussion at the time took the general direction of fill by means of the debris upon the hills above which is very extensive, as running from nothing to twenty to 30 feet in depth, a debris composed very largely of rock, not much water-worn, fairly flat and angular, which would pack very well, and sufficient silt or soil, principally of silt to pack thoroughly, to make exactly what we have below this as the bed of the river, as the entire bed of the river so far as we can go up and down the river with the bed of the river composed of rock with the interstices filled with this rock and soil, if that could be done along there; along at this point we should have the bed of the river so much higher composed of the same matter as the bed of the river is everywhere composed of in the canyon by nature. And how to do that was—the question was how to retain this material so that the silt and soil wouldn't wash out while the empacking was being done; and for that purpose it was suggested either one of two plans. One was the plan of either crib filled with rock or masonry piers or walls extending across the river bottom, filling it behind all the way, and raising another one and filling back, etc., until the fill had reached the desired height; and the question involved there was simply one of how solidly this material would empack here furnishing a foundation. This layer for the pier which follows there or the wall which follows there—this pier it was deemed necessary to take to bed rock if possible in order to avoid loss by seepage. We discussed the question of cementing in here to prevent this seepage. Another plan suggested and urged by some of the engineers was the feasibility of erecting at once a large
474 solid masonry work, starting the bottom very broad, and bringing each one of these behind the other, which would make a structure some such shape *a*f that (indicating) and it was in each case; this would be carried up behind the rising debris and material here, making it necessary all the time for the water to flow over, and simply acting as a toe to this material in place. It was argued very strongly and practically agreed upon that could we once get this filled this might be entirely removed and still be perfectly safe, but that would not be possible, therefore we should put up something here which would hold this while in construction. Those who advised this form of construction among others myself, did so on account of the large amount of good rock not quarried, which would be required, and the possibility of quarrying it not with powder but by power drills, exactly as has been done in the sanitary districts of Chicago; a matter which I had looked into

with a great deal of care and visited the district on purpose to examine but a few months before; and I advised that by suitable power means this structure could be built, although it is ten times as large, for less money than this (indicating) because we could handle such numerous quantities in cubical pieces, setting them in cement, but the per cent. of the cement taken would be so very small on account of the regularity of the rocks, cutting them out of the quarry in perfect shape and practically in the shape required for each particular place. This is not a theory on my part, but is a practice that has been carried out and demonstrated.

Mr. HARKNESS: If the court please, the witness was asked to state to the court what plan was discussed: he is now stating to them the discussion and not the plan, which I think is immaterial.

Mr. HENDERSON: Well, it has extended into that.

The COURT: Let the witness confine himself to answering the questions.

475 Mr. HENDERSON:

Q. Yes. Now, state Mr. Nunn, these were the plans that were—these plans were discussed and talked about there?

A. They were.

Q. Now, Mr. Nunn, just state what was discussed there in relation to power to be used in making this principal dam?

A. As I stated a moment ago, Judge, the use of such a scheme as this made it necessary to use a great deal of power in quarrying these rocks, in transporting them and placing them. In any case it was necessary to use power for hydraulicking down this material which would fill the canyon from this dam up.

Q. Now the question is about where that was to come from what the scheme was as to where it was—could be had and obtained?

A. It was to be furnished by the temporary plant. This is in our first preliminary report in 1894.

Q. That is, generated in that way below and transmitting by wire up there?

A. Yes sir.

Q. The purpose then of the temporary plant was to connect these upper works, the principal part of it at least, or a part of its use?

A. Yes.

Q. Now how long did you remain here in Provo at that time, did you go away with them or did you stay?

A. I went away with them.

Q. Went away with them; and when did you come back again.

A. A week later.

Q. And what was being done up there then?

A. It was at this time that I recollect clearly, I think at this trip, the Suhr line staked and flagged, as I spoke of a few moments ago. There had also been run a level about twenty feet below, and I think one was being run then twenty feet below that. They were

then working upon the preliminary level for the temporary
476 ditch, canal or flume for the temporary plant which was to take the water from the stream at the most feasible point, the cheapest point to get the required amount of power.

Q. Now at that time or at any time during 1895, was there any work done up about Standing rock, or Hanging rock?

A. Mr. Cramer had been working along that line some with an instrument, principally without however, most of the time. He was interesting himself especially——

Mr. WEDGWOOD: Well, Mr. Nunn, was you there while he was interesting himself?

A. I was.

Q. How long a time?

A. He was interesting himself all the time I was there.

Q. Well, how long a time was you there?

Mr. HENDERSON: He said he came back there and stayed several days, I don't recollect the number of days.

A. I was there four, or six days I should say the first trip, one day the second, and three the third, if I remember rightly. Mr. Cramer was making a detail study of the reservoir opportunities.

Q. Well, now was anything done in the way of clearing off brush across between the Hanging rock and the river?

A. I am not prepared to say that there was during this fall. It is my impression that there was, but I can't be positive.

Q. Just state whether — was any pit-holes dug or anything of that kind, any exploration of that description?

A. Well, I believe that that was done later.

Q. You believe that that was done later?

A. Yes sir.

Q. Now you stayed here some days at that time, and was you back again that year?

A. I was not.

Q. You didn't come back that year. When did you come the next year, '96?

A. Well, I say I wasn't, I may be mistaken; I may have come again that year, I have forgotten it, and don't recollect to have come here at all in the year 1896.

477 Q. In 1896?

A. In 1896.

Q. You wasn't here in 1896?

A. I don't think so.

Q. Well, then, you don't know anything about the operations that took place in the spring of 1896?

A. I do not.

Q. When did you come back here again Mr. Nunn?

A. In February 1897.

Q. February of '97, that was a year ago last February?

A. Yes.

Q. And since that time you have been, state whether you have been connected with it actively?

A. I have had charge of all the construction work in connection with the plant as engineer.

Q. Mr. Nunn how long have you been an engineer?

A. I have been connected with the Telluride Power Company or with Mr. L. L. Nunn for nearly eight years in engineering work. Whether I was an engineer in practice before that I can't say.

Q. Well, what was you doing before?

A. I was engaged for one year in street-railway work. Previous to that time was a teacher in Massachusetts.

Q. Well, then, you never took a regular course in civil engineering?

A. Not in civil engineering, my work was in electrical and mechanical.

Q. In what?

A. In electrical and mechanical.

Q. Oh, yes, in electrical and mechanical; well, you did take a regular course in that, did you?

A. Well, I never was graduated from the technology course. I graduated from a classical course, and spent a large per cent. of the time on mechanical work, particularly after leaving my regular course; took a special course in laboratory work.

Q. Now, you have made a careful study of the conditions up this canyon. I understand from you- statements?

A. I have.

Q. Have you made computations upon the power that would be produced and could be generated from the dam such as you
478 first contemplated there?

A. I have.

Q. What power would you say could be generated in your opinion?

A. From the normal flow of the river, supplemented from the elevation and the capacity so secured, I think something over—a trifle over nine-thousand-horse power could be developed at the mouth of the canyon with the fall which intervenes.

Q. And you say at the mouth of the canyon; why do you fix that place, was that, state whether there was any—the idea was to erect any works there at the mouth of the canyon?

A. Certainly the idea was to erect the works below all the fall which we could control.

Q. That is the principal works when they were to be erected was to be at the mouth of the canyon?

A. Yes sir.

Mr. WEDGWOOD: Oh, we object to his leading.

Mr. HENDERSON: Well, I know it is leading, but that is substantially what he said.

A. I might say that it is necessary to return the water to the river bed at the mouth of the canyon, at the head of the canals which have the prior rights, determining the point for the power-house.

Q. Now, what have you made figuring and have you any judg-

ment as to the net profit that there would be in the maintenance of such a dam as that, such a power?

Mr. HARKNESS: We object to that as wholly immaterial.

Mr. HENDERSON: It is the same question that was passed upon.

The COURT: I think the court really passed on that matter yesterday. Answer the question.

A. I have.

Mr. HARKNESS: Note an exception.

Mr. HENDERSON:

Q. Will you state what the result is?

Mr. HARKNESS: We object to that as immaterial, and same ruling I suppose, and note our exception.

Mr. HENDERSON: If the court please, I would like to make an arrangement, that whenever there is an objection made, and a ruling made, that an exception is taken by the party who desires it without repeating it every time.

479 The COURT: Let it be so understood.

Mr. HENDERSON: I will save time.

A. I think that nine-thousand-horse power can be sold, and with a profit of approximately $225,000 per annum. That is what I believe is about $25 horse-power per year.

Q. Now have you made any calculations as to how, as to what power might be generated by it for commercial use, of a dam say 25 feet at Hanging rock or Middle rock?

A. So far as such a dam should accomplish the purpose I think it would—I should say about 6,000-horse power instead of nine, a little less than 6,000-horse power.

Q. Where would that generate it at the mouth of the canyon?

A. Yes sir.

Q. Measured at the mouth of the canyon?

A. Yes.

Q. And state whether that would be per horse-power the same profit as the other?

A. Perhaps not quite as great although I figured it at the same.

Q. Why not the same?

A. There is a greater profit always in the operation of a larger plant than a smaller one when the larger plant can be properly located and operated, and I had measured in this case, the larger plant could be operated with a less proportionate running expense, and I see no reason why the power could not be sold as advantageously.

Q. Now, Mr. Nunn, I want to ask you, have you been connected and acquainted with this since you started your works up there?

A. I have.

Q. State where these works are located?

A. The present works?

Q. Yes?

A. The diverging dam of the present works is located, I can't state the number of feet, but approximately I should say 300 or 400 feet below what is called Middle rock.

480 Q. And then where are the works located?

A. The power-house is located at the end of eight thousand feet of flume.

Q. Down the river?

A. Down the river.

Q. And how far is that from the mouth of the canyon?

A. Something less than four miles, between three and a half and four.

Q. Then your works are three and a half or four miles up the canyon from the mouth?

A. Yes.

Q. Was that the location selected for your principal works in the original scheme?

A. Oh, no; this is the temporary just to get a small part of the head.

Q. Now in the operation of the present scheme, I want to ask you about the necessity in generating power for electrical purposes, about the necessity of having a head at the dam, and why it is necessary; just explain that?

A. We find that the river is, river bed is occupied a large per cent. of the way down by extensive boulders in many cases they protrude out of the water in low season. Excessive cold weather effects these boulders and temperature so as to actually freeze the water which comes in contact with them; that means that we have a great deal of what we call slush or anchor ice. This ice comes in pieces from very small particles almost like snow flakes, up to large chunks, and must be gotten rid of in order to run at all. There have been twice during the last spring, present spring when the per cent. of water has been very small as compared to the per cent. of slush ice which has been flowing down, when instead of the river flowing like water, it comes tumbling down like some thick substance, wet meal or something of that kind. At both of these times we were compelled to shut down, that is we could furnish very little power, extremely little, and at both times it kept

481 us closed down long enough to enable us to clear that material way from our head works and flume. A head of water above the entry to the pipe would by floating this material, give us free water below at the pipe so long as there was free water. This wouldn't dive and enter the entries to our waterway. This condition has never lasted and I don't think it will last under any circumstances more than a comparatively few hours, as it depends for its existence not only upon low temperature, but upon the wind which blows down through the canyon, and I think occurs between midnight and morning, and has all disappeared by ten o'clock in the morning; and a reservoir of sufficient size to hold water enough to keep a head above the entries to the waterway for that length of time, say ten or twelve hours, at the outside, 24 anyway, would give us immunity from this source of danger and annoyance.

Q. It would assist apparently if I understand you in equalizing the flow?

A. It would supply water at that time that the water is being taken up in ice so rapidly, and would also keep the ice out of our way.

Q. Now, for instance, calling your attention to a dam there say 25 feet high, I want to ask you what effect that would have if any, upon equalizing the flow during the period of twenty-four hours inequal, where you were using an unequal amount of power?

A. I haven't made personally the calculations upon such a reservoir, but taking the figures of my assistant engineers, I believe that such a reservoir would hold enough water under all circumstances to permit us to carry a materially larger load at daytime than at night, or night than at daytime, or equalize the amount of water demanded, or furnished us, permitting us to carry a larger load at one part of the day than another; amount to the same thing.

That is all; you can cross-examine.

482 Cross-examination.

By Mr. WEDGWOOD:

Q. Mr. Nunn, you spoke about a dam twenty-five feet high there, and that would reli-ve you from this mush or anchor ice; would it be necessary to be just twenty-five feet high for that purpose?

A. I don't know that it would.

Q. Your flume now is how much above the bed of the river?

A. What point in the flume?

Q. Well, at the dam?

A. Well, the bottom of the flume, top of the flume or water surface.

Q. The bottom of the flume?

A. Above the bed of the river.

Q. Yes?

A. Well, I can't tell you exactly; it would have to be a guess. I can get our plans and tell you exactly.

Q. Now do you know how high your dam is above the bed of the river?

A. Not exactly.

Q. Do you know how the top of your diverting dam and the top of your flume compare?

A. Well, within an inch or two; the top of the dam is—I have never measured it since its construction, but the plan I believe calls for it to be about fourteen inches higher.

Q. The dam fourteen inches higher than the top of the flume?

A. I believe so.

Q. Now supposing your dam was raised nine feet above its present height, that would make it ten feet and two inches above the top of the flume; what would be the effect so far as mush ice or anchor use is concerned?

A. The effect would be all right so long as you had water enough above it.

Q. Then if your dam was raised nine feet higher than it is now the difficulty as to anchor or mush ice would be done away with?

A. No, sir.

Q. Well, what did you mean by saying it would be all right so far as ice was concerned?

483 Mr. HENDERSON: No, he didn't say that.

Q. Well, what did you mean by what you did say. What did you say?

A. I said it would be all right as long as there was water above it.

Q. I say, then you mean to be understood as saying that the only difficulty then would be as regards quantity of water, don't you?

A. Yes.

Q. Then you mean to be understood as saying that it would be all right so far as anchor or mush ice was concerned?

A. No.

Q. Well, then please give me a direct answer to my question, Mr. Nunn, if your dam was raised nine feet higher than it is now, so that the top of the dam would be nine feet and two inches above the top of the flume, what effect would that have as far as mush ice or anchor ice is concerned. Now just answer that question squarely?

A. What effect it would have?

Q. Yes.

A. It would remove that difficulty so far as mush ice was concerned, so long as it was full of water. As soon as the water failed it would have no effect and no help.

Q. Well, in order to effect—to have no effect it would have to fall to the level of the top of the flume?

A. No sir not by a very great deal.

Q. Well, at what point would it have to fall so that it would have no effect?

A. I think that it couldn't fall two feet without having effect.

Q. Then so far as ice is concerned you need approximately eight feet of head above your flume to obviate that difficulty?

A. I don't believe that less than that would obviate it.

Q. Now Mr. Nunn do you know how much water would be held back by a dam nine feet higher than your present dam?

The COURT: You mean Mr. Wedfwood at the present flume?

484 Mr. WEDGWOOD:

Q. The present dam, yes?

A. I haven't calculated it.

Q. You haven't calculated it?

A. I can judge by the other somewhat.

Q. Do you know how much water would be held back by a dam 25 feet high?

A. I can tell you in a moment.

Q. Well, have you ever figured it up to this date?

A. I have taken figures given by the assistant engineers and calculated a result.

Q. You haven't it in your mind now?

A. I can give you the result in my mind.

Q. Well, give us the result Mr. Nunn?

A. About 10,000 cubic feet per minute for thirty hours.

Q. About 10,000 per minute for thirty hours; how long would that run your flume?

A. About twenty hours.

Q. It would equalize your flume for how long?

A. It depends upon what it had to compensate with.

Q Well haven't you made any calculation as to that?

A. It would have to supply practically all the water at times for several hours.

Q. Several hours?

A. This isn't a matter which can be calculated exactly.

Q. Well, can't you tell me how long it would equalize your flume if your dam was nine feet higher than it now is; if you want a little time take it.

A. About one hour.

Q. About one hour?

A. Yes sir.

Mr. HENDERSON: What was that, Mr. Wedgwood.

Mr. WEDGWOOD: A dam nine feet high would equalize it one hour.

A. I judge that I told you; I didn't calculate it.

Q. Well, what, is there so great a difference between 20 hours and one hour; you are taking practically one-third of the height of water, ain't you?

485 A. Nine to 25, to 27 it would be one-third.

Q. Yes; what do you mean by a twenty-five-foot dam Mr. Nunn?

A. I mean a dam which would raise the water over that country 25 feet deep.

Q. Now, where with reference to your present dam would that 25 feet be, with reference to your present dam?

A. Well, I was thinking of the dam being a little further up the stream.

Q. Yes; do you mean high or low water?

A. I mean above, with reference to the flow of water.

Q. Well, high or low?

A. I don't understand your question.

Q. Well, you say 25 feet from some point, that must be a fixed point in order to make the calculation, because the water——

A. Oh, high or low water?

Q. Yes.

A. Well, I—it would have to be from the high water.

Q. Well, you have made your calculations with reference to 25 feet from somewhere, Mr. Nunn, haven't you?

A. Yes, I was just thinking what from.

Q. Well please tie that somewhere so that we will know where it is.

A. The present dam is made to accom-odate high water? I should say 25 feet from high water, above high water.

Q. Well then tell us what you mean by the present dam accom-odating high water?

A. Well, the present dam is raised to a height, and sufficient length of weir, with sufficient height of walls so that flood water in Provo river may pass over it without its breaking down the banks or flooding into our waterway or getting out of the banks; that is what I mean.

Q. Well, Mr. Nunn you say you have made a calculation, or the engineers have, of 25 feet of water would do certain things; now if you have made a calculation which is worth anything in
486 engineering it must have been from some point?

A. Twenty-five feet above the high-water mark.

Q. Well, where is high-water mark is what I want to get at?

A. On our dam for instance.

Q. Anywhere, so that we can get at it; yes on your dam?

A. Well, with reference to what?

Q. Your dam or whatever you mean?

A. Oh, it is about a foot and a half, possibly not over a foot below the top of our dam.

Q. About a foot and a half?

A. It was designed to be one foot below the top of our dam.

Q. Then were your calculations made with reference to that, the point a foot below the top of your dam?

A. They were made with reference to high-water mark.

Q. Well, the plain facts of it is they weren't made with reference to any point, were they?

A. Yes sir.

Q. Well, if so, tell us what they were?

A. I just stated above high-water line.

Q. Well, was that point one foot below the top of your dam, were calculations ever made from that point?

A. I don't think any calculations were ever made from where our present dam is.

Q. Well, projected from it?

A. I don't think they were ever projected from our dam. It was made at the Hanging rock.

Q. At Hanging rock?

A. Or between there and the Central——

Q. Well, the plain fact of it is, Mr. Nunn, that no definite calculations from any fixed established point has ever been made by you or yo-r company, has there?

A. I don't think that is true.

Q. Well, please answer the question, has there or has there not?

A. I just said that I don't think that was right.

Mr. WEDGWOOD: I submit that he can answer that question direct.

487 The COURT: You can answer that by yes or no, Mr. Nunn, and then any explanation.

Question read.

A. Yes, there certainly has.

Mr. WEDGWOOD:

Q. Now tell me from where that point is?

A. That point is from the surface of the water at a point lying somewhere between Middle rock and Hanging rock, a distance of a few hundred feet, where I am not informed, and upon the bases of water surface at that time, the date I am not informed, of which we can get and present if the court wishes.

Q. Have you any data anywhere that you can give that to us.

A. We have.

Q. Well, where is it?

A. I can't say where it is; it is somewhere, here or over at the office, or in Mr. Searle's pocket. He was figuring on it the other day.

Q. I would like to have that Mr. Nunn.

A. Very well.

Q. Now Mr. Nunn, after you took the water out at this dam, it flows through a flume?

The COURT: What dam do you refer to?

Mr. WEDGWOOD: Why, there is but one dam.

The COURT: Well, you mean the constructed one?

Mr. WEDGWOOD: Certainly, at this diverting dam, you take the water through a flume 8,000 feet to your works, do you not?

A. Yes sir.

Q. Now the fall of the flume isn't very heavy you say?

A. Not very heavy.

Q. Now, Mr. Nunn, doesn't mush or anchor ice form in the flume?

A. No sir.

Q. Never does?

A. No, sir; never does.

Q. And didn't you say that the wind is what formed it?

A. I said partly.

488 Q. Partly; didn't you say it was chiefly owing to the wind?

A. No, I believe not.

Q. What is the fall of the flume?

A. One foot to the thousand feet.

Q. One foot to the thousand feet, and you say that anchor or mush ice wouldn't form in that flume in going that 8,000 feet in going that grade?

A. I said it hadn't.

Q. It hadn't; well, I will ask you if it wouldn't form in there?

A. It is my opinion that it never will.

Q. Your opinion it never will; now you say by taking the water out eight feet below the surface of the water you have no difficulty from mush or anchor ice?

A. That is my opinion.

Q. Do you mean to say that it wouldn't be drawn into the flume

A. It wouldn't have done at any time that I have observed it; how long a cold spell we may have in the future I cannot say, but it is my judgment it never will be.

Q. Well, I want your judgment as an engineer, and your experi-

ence, that with water raised there eight feet, or 25 feet above the height of the opening in your flume—I will withdraw that. How wide and how deep how high is the opening in your flume; in other words, what is the size of your flume at the diverting dam—approximately, I don't care for its being exact?

A. Twelve by twelve feet.

Q. Twelve by twelve feet?

A. Yes sir.

Q. And how large is the flume.

A. The lower section of the flume is built upon a radius of 3 ft. 2 inches. I believe the upper section six feet four inches, I think.

Q Now then I understand you that where the flume connects with the diverting dam it is probably a little more and a semi-circle 12 feet in diameter?

A. No sir, it is square; 12 feet high and 12 feet wide.

Q. Now what is the size of the orifice through which the
489 water flows there?

A. Controlled by the size of the gates to let the water out.

Q. Well to fill your flume to its carrying capacity what would be the size of the orifice through which the water passes?

A. When the water is low it is to be six by twelve.

Q. If it is high a little less?

A. Yes a trifle less.

Q. Six by twelve; then I understand you, Mr. Nunn, that supposing that is the orifice of your flume (illustrating) that if you was allowed to take water, raise water 25 feet above that point, where you get the water would be taken through an orifice 12 feet wide and somewhere perhaps four to six feet high, the top of it approximately 25 feet below the surface of the water, is that correct?

A. No, the orifice would have to be much higher than four to six feet.

Q. Well——

A. And the top wouldn't need to be 25 feet below the crest of the dam.

Q. Well, supposing you was allowed to raise the water 25 feet from this point, of which we have been speaking about, would the orifice through which the water would be taken below that 25-feet level, where would it be with reference to that, approximately?

A. I should say that the orifice should be about ten feet in height, and should prefer to have it fifteen feet below the crest of the dam, but I don't know but what twelve feet—no it should be 15 feet below the crest of the dam.

Q. Well then if the dam was full of water there would be an orifice ten by twelve feet, 15 feet below the crest of the dam through which water was flowing.

A. With its top 15 feet below the crest of the dam.

Q. Yes?

A. Yes.

Q. Through which water was flowing?

A. Yes.

Q. Now do you mean to say that the suction wouldn't draw everything there was at the top of the dam right down through that?

490 A. I do mean to say that.

Q. You mean to say that it would not?

A. I mean to say that it would not.

Q. Now, can you give me any reason why?

A. Yes sir; by making the orifice large as we have designed, the velocity of the water in that would be very slow, and made so purposely to prevent anything like suction.

Q. You say there would be no suction there whatever?

A. There would be no suction apparent at the surface.

Mr. HENDERSON: Wait a moment.

Mr. WEDGWOOD:

Q. Well no suction sufficient to drag mush or anchor ice down through there?

A. No sir; there wouldn't be.

Q. You say you are a student of the Massachusetts——

A. (Int.) Yes sir.

Q. Did you ever have any experience with water power in Massachusetts?

A. Not much in Massachusetts.

Q. You know there is some water power there?

A. I have seen them.

Q. You are familiar with the Merrimac river?

A. Am I familiar with the Merrimac river?

Q. Yes.

A. Reasonably so; lived there for several years.

Q. Now don't you know as a fact that anywhere from a mile and a half to three miles below the dam where the water is taken out in the large canal, with twenty-two feet in depth of water that there they are occasionally obliged to stop on account of mush or anchor ice; don't you know that?

A. Don't I know they are obliged to stop occasionally?

Q. Yes.

A. I do, but very rarely, but it isn't taken out at that depth that you speak of; it is taken out at the surface.

Q. Taken out at the surface?

A. Yes, sir; upon canals, only one taken out in the whole city of Loyal below the dam.

491 Q. Where is that one?

A. Where is that one that is taken out?

Q. Yes?

A. It is the one that is taken out below the dam. All of the canals for power purposes are taken out above the dam. No gates except dykes, gates.

Q. That is true where it comes out of the river, but where they go from the canals to the conduit where is it taken out?

A. Well, the wheel is always put in the head under the forebay.

Q. Yes?

A. The canal leads into the forebay, but there is no flume, no

place where the ice could possibly stay since the entire volume is in play.

Q. What do you mean by that, do you mean to say that the conduit that goes to the wheels comes from the surface water?

A. Why it certainly does in every case.

Q. Now, Mr. Nunn, the first time you went up this canyon was when?

A. October the 24th, I believe, in '94.

Q. Now which way did you come into the canyon at that time?

A. I went up from Provo.

Q. You went up from Provo; and how far up the river did you go?

A. Above Ferguson's place some little distance.

Q. Of course you examined the canyon as you went up?

A. I did.

Q. You know that there is a broad strip of flat lowland this side of the mouth of Provo canyon, very near the level of the river?

A. Yes.

Q. After you enter the canyon for a mile or so above the bridge the canyon is quite narrow isn't it?

A. For a mile or so above the bridge?

Q. Yes; or approximately?

A. Narrower than it is in other places, yes.

Q. Well, isn't it narrow up to the end of that mile, that is quite?

A. At the county bridge it isn't.

492 Q. I mean the whole general trend of the canyon from the mouth up to that, above that point?

A. Well, narrow.

Q. It is narrow?

A. Narrow in a sense.

Q. The walls are precipitous and rocky are they not generally speaking?

A. Quite so.

Q. You went up I suppose what they call the county road?

A. Yes.

Q. You know that there is a county road running up there?

A. I do.

Q. It runs very near the level of the river, does it, a few feet above?

A. Well, it varies.

Q. Practically along the side of the river all the way up to the point I have mentioned?

A. Yes.

Q. Now when you got up there what did you say you found going on there?

A. Well, I didn't find anything going on there. I found Mr. Matthis and his surveying gang surveying down below the county bridge.

Q. Down below the county bridge?

A. Yes.

Q. Now, they were on the south side of the river, were they?
A. Yes, sir; they were on the county road at the time.
Q. On the county road; that is all the work you found going on there at that time?
A. Mr. Matthis and his gang, yes.
Q. Yes; how far is that below Middle rock?
A. Where he was then surveying?
Q. Yes.
A. Well, I don't remember just where I found him as between the mouth of the canyon and the county bridge
Q. You can't tell where it was?
A. No, It was somewhere along in there.
Q. That is as definite a recollection as you have of what was going on there at that time?
A. It is as definite a recollection of where I found Mr. Matthis when I drove up.
Q. Well, as to what he was doing?
A. He had been——
493 Q. Well, I don't care what he had been; I am asking you what you saw?
A. He was working upon a survey extending from the mouth of the canyon to the North fork.
Q. Just a minute now; I insist that he answer my question.
The COURT: Read the question.
Last three questions read.
A. He was doing the work on a survey from the mou*nt* of the canyon to the North fork.

Mr. WEDGWOOD: If the court please, I move to strike it out, and ask that the witness be compelled to tell what that man was doing at that time.

The COURT: You can answer that Mr. Nunn.
A. Standing in the road talking with me.
Q. Now what date was that?
A. I believe that was October 24th or 25th; which day I am not sure.
Q. Now what did you see on the ground?
A. Stakes and cut brush.
Q. Stakes and cut brush; where did those stakes commence as you went up the canyon?
A. At the head of one of the canals, I can't tell you which one; I don't know it by the name.
Q. Near the mouth of the canyon?
A. Yes, at the mouth of the canyon.
Q. And how far up did you see those stakes?
A. Oh, I saw one in the road in front of Mr. Ferguson's house.
Q. Did you see a line of stakes up as far as Mr. Ferguson's house?
A. Well, how near must the stakes be together to form a line. I saw them all the way up from time to time.

Q. How near was the next stake you saw to the stake you saw in front of Mr. Ferguson's house?

A. I don't remember. I should presume within 500 or 600 feet.

Q Five or 600 feet now which side of the river were the stakes on going up?

A. They followed from one side to the other according to
494 the line the transit would take, or the level rather, that he was using.

Q. You saw the stakes on both sides of the river?

A. The road.

Q. Or both sides of the road, which side of the river?

A. Followed the county road in general.

Q. In general, did that cross the river at the bridge?

A. It did.

Q. And went upon that side of the river?

A. Yes.

Q. Now, where did you see brush cut?

A. At almost every turn of the road which lay in such a way that it was to Mr. Matthis' advantage to cut brush in order to get through instead of changing his instrument.

Q. You saw what brush was cut was necessary to run that transit line?

A. Or level line, whichever he was running.

Q. Now how long did you stay up the canyon, more than one day there?

Mr. HENDERSON: Which time is this?

Mr. WEDGWOOD: It is October 24th or 25th.

A. I was up the canyon almost every day from that until about the 7th of November at the time, about two weeks.

Q. Was you staying up Provo canyon during that time?

A. Well, I believe my grip was down here, but I believe I stayed up the canyon a couple of nights at Mr. Thayer's.

Q. But you was making this your headquarters, coming in at this time?

A. Yes.

Q. Now what did you see done during that time in addition to what you have described?

A. More level lines and transit lines.

Q. Now, this was in 1894?

A. This was in '94.

Q. Now, what other—what was the level of this line that you have spoken about approximately?

A. The bottom of the canyon.

Q. The bottom of the canyon; how near the river bed?

495 A. Just as near as the road happened to go at different places; you understand Mr. Wedgwood, that this was run to determine the general contour of the river.

Q. The general contour of the river, and followed along practically the river?

A. Yes.

Q. What other lines did you see between October 24th and November 7th?

A. The survey made to determine the ground plan or plat.

Q. Who did you see make the survey?

A. The work on the ground was done by Mr. Matthis and his men and part of it by Mr. Cramer.

Q. Mr. Cramer was there?

A. He was.

Q. Did he come with you?

A. He came with me.

Q. Now, what other line, select one other line that they ran; what other thing did you see done there?

A. Mr. Cramer ran a line from a point about 75 feet I should guess above the county bridge down some distance to determine the exact fall at that point, and another one from a point——

Q. Well now, wait; I want to get at that; what did he do in running that line?

A. He had a little brush cut, and he had sufficient stakes set to determine the relative elevation of the two ends.

Q. Now which side of the river did he run that on?

A. On the north side.

Q. On the north side, commenced just above the bridge?

A. Yes.

Q. What else was done?

A. Another similar line, beginning at the Middle rock and extending down oh, a thousand or 1,500 feet.

Q. What level was that?

A. It was the level of the water at Middle rock.

Q. It was the level of the water at Middle rock; a thousand or 1,500 feet?

A. Yes.

496 Q. And which side of the river?

A. On the north side.

Q. On the north side; now what else did you see done?

A. I saw three, four or five pit holes dug for the determination of the quality of the soil, I can't tell you which.

Q. Where were they dug?

A. One was dug behind Mr. Thayer's house, one about a thousand feet above, and another up nearly opposite the Middle rock.

Q. Now, they were dug Mr. Nunn to determine the character of the soil as to the feasibility of a canal?

A. Yes.

Q. And that canal ran between the river and Mr. Thayer's house, didn't it, on the north side?

A. Why, it has never run anywhere yet.

Q. No, I understand that; but the lines you had been running, and place where you dig those pit holes was between the river on a line between the river and Mr. Thayer's house, wasn't it?

A. Why, not on a line; two of them were up pretty high on the slope of the hill.

Q. Where in reference to Thayer's house?

A. One of them north behind it.

Q. How far behind it?

A. Well, my judgment on distance isn't very good, I should say 1,500 feet up the hillside.

Q. 1,500 feet up the hillside?

A. Yes.

Q. How many was dug up there, more than one?

A. One.

Q. Well, that wasn't dug with reference to determining the character of the soil for a canal?

A. It was.

Q. Well, we will confine ourselves to those that were dug further down the hill just now, the balance of them were dug on a level line ran between the river and Thayer's house?

A. No, sir; they were not.

Q. They were dug indiscriminately up and down the hill?

A. Not altogether indiscriminately.

497 Q. Well, what were they done then so as to have a distinct object those that were not done indiscriminately?

A. Well, shall I tell you how they located?

Q. Yes, tell me how they were lying with reference to each other?

A. Well, Mr. Cramer walked up on the—Mr. Cramer and myself walked up on to a sort of slope or hogback which comes down, which I think is a few hundred feet above the county bridge, where the county bridge was then, and we looked both at once, and says "Well, it looks as *as* if a canal could come somewhere along here, and guess we better have a hole dug here and see what it looks like," and we had one dug.

Q. Well, did you pick those holes with reference to those lines?

A. Not especially with reference to those lines.

Q. Then the object of digging holes was to find out generally the character of the soil?

A. Yes.

Q. Now, these lines which were run at that time were just simply trial lines to aid the eye in elevation; they wasn't no field-notes were kept of them; and they wasn't run or staked permanently?

A. Well, I can't say that no field-notes were kept, but they were not run in a careful manner. I don't——

Q. And that was all that was done up to November 7th, was it?

A. Well, that is all to the time I left.

Q. Now when were you there again, Mr. Nunn?

A. November—October the 12th—I think it was in the next year.

Q. October 12, '95; now which way did you come into the canyon at that time?

A. The same way.

Q. From Provo; now what did you find in regard to the line that you saw Mr. Matthis working on; anything done in regard to that?

A. I don't think so.

Q. On those lines that were run between October 25th and November 7th the year before, had anything been done on those?

A. There had been considerable brush cut, at two points;
498 one point I am very sure, and the other one I feel confident of; there were two points, and I think the point was the Middle rock.

Q. Middle rock?

A. Yes.

Q. Now, you saw that condition when you got there on the 12th this condition of the brush?

A. Yes.

Q. Now, how wide was that strip of brush cut?

A. Well, it wasn't cut exactly as a strip; brush had been cleared there around quite a large space right around Middle rock; around Middle rock considerably, but more particularly around a point above the old county bridge.

Q. Well, give us approximately the area of brush that was cut around Middle rock if it wasn't cut in a strip.

A. Well, as I testified before, I am not sure that that was the point. I was pretty much a stranger to the canyon at that time

Q. Well, the only point that you can locate definitely where brush was cut is just above the county bridge.

A. Yes, I believe that is all that I can locate definitely.

Q. Now, what was the shape of the piece of ground which had been cleared of brush at that point?

A. Well, it is the shape of the flat between the river and the bluff on the south side, as I recollect it, and a piece ran along the river for a distance upon the north side cleared out to the road, and then the river bank from there down to Mr. Thayer's house.

Q. Well, was it cut in the form of a strip or rectangle down to the river anywhere, Mr. Nunn?

A. Well, there was the river on one side and the road on the other, and I think they cut out between, and that is a pretty irregular shape.

Q. The distance between the road and the river isn't very straight?

A. Well, it isn't only the county road, but the road that Mr. Thayer built for his own use; it varies from 25 feet to 300 or 400 or 500.

499 Q. And pretty steep there too, isn't it?

A. In places.

Q. So the brush had been cut out in a line from just above the county bridge between Mr. Thayer's road and the river, down the river?

A. No, I can't call it a line, at least not a very straight line. A crooked line.

Q. No, but going down the river?

A. Yes.

Q. Now, for how long a distance had that been cut out?

A. Oh, I don't remember how far.

Q. Approximate it.

A. Well it is pretty hard to approximate it. It runs along the foot of the hill there. I never walked along and measured it.

Q. Well, could you tell approximately; 1500 feet?
A. Well, probably not over that.
Q. Well, perhaps 1500 feet?
A. Well, yes.
Q. Now, that I understand was between Mr. Thayer's house and the river?
A. Between Mr. Thayer's house and the river?
Q. Yes; on a line between Mr. Thayer's house and the river?
A. Well, it came——
Q. That is it didn't go up higher up the hill than Mr. Thayer's house?
A. Yes, it did, it extended. Mr. Thayer's house represented at least the lowest point of it, or the other part was below the county bridge.
Q. Well, you don't understand what I mean by higher in elevation?
A. Higher than Mr. Thayer's house?
Q. It run between Mr. Thayer's house and the river; Mr. Thayer's house would include the highest point up the hill?
A. No, Mr. Thayer's house is lower down and the road between his house and the brush.
Q. It may be lower in altitude. I think you understand me, Mr. Nunn?
A. I certainly don't Mr. Wedgwood.
500 Q. Now here is the level of the river (illustrating) and here is Thayer's house, we will say, and the hillside here; this brush was cut between the river and Thayer's house, and on the line of the river?
A. But Mr. Thayer's house doesn't occupy any such position as that.
Q. Well, you answer my question?
A. Why, it certainly was cut to a higher point than Mr. Thayer's house.
Q. Well, was it cut up the hill this way, behind Mr. Thayer's house?
A. Yes, but not behind his house.
Q. Wasn't cut behind his house?
A. No, not that I recollect.
Q. Was it all in the bed of the canyon?
A. It was all between the walls of the canyon certainly; what do you mean by the bed?
Q. You know that there is an approximately level bench a short distance above the river bed don't you?
A. No, I don't.
Q. Ain't Mr. Thayer's house——
A. I never found it; not——
Q. Never found it?
A. More than a hundred feet at a time.
Q. What else did you find besides this brush—just a moment; where did that cutting of the brush connect with the river?
A. Above the county bridge a little way.

Q. Can you tell me approximately how far?
A. Oh, I should say a few hundred feet.
Q. Now, what else did you see besides that?
A. At this time?
Q. Yes, at that time?
A. Including all the work that had ever been done up to this time.
Q. Well, what else; give me some other one thing besides that brush-cutting that you saw?
A. The work that I previously stated was done the previous year, and pit holes dug, and the lines run.
Q. Well, we have got through with that, Mr. Nunn.
A. Well, I think that is all, so far as I recollect.
501 Q. That is all that you saw at that time?
A. Yes, I think so.
Q. When did you come up there again?
A. I think it was on the 21st.
Q. October 21st?
A. I believe so.
Q. Now what had been done in the meantime, if anything?
A. A part of the Suhr line, the sixty-foot line had been run as well as two others.
Q. What?
A. As well as two others.
Q. Yes; now take the Suhr line first; was Mr. Suhr working on it when you went up there, October 25th?
A. Well, I can't be sure but I believe he was working on that sixty-foot line that day.
Q. Now, that sixty-foot line started from where, farthest up the river?
A. Do you mean how far up the river it went?
Q. Well, give us some point where that sixty-foot line started?
A. Well, I don't—I have no way of telling where the engineer first set his instrument when he started. It extended up the river above Hanging rock.
Q. Above Hanging rock?
A. Yes.
Q. Now, where did you first strike that line—well, when you went up there, where did you first——
A. I was along on the line; I can't tell you where I first came up to it.
Q. Did you follow the line that day, that line?
A. More or less.
Q. You went up on to it, did you?
A. Yes.
Q. Can you tell where you went up on to it?
A. Well, in a general way, between Hanging rock and the county bridge or Thayer's house.
Q. Now how far did you walk along that line?
A. I can't say at this time.

Q. Well, can't you approximate to a hundred yards or a mile?

502 A. I don't recollect. I have the walking along the line confused slightly. At the next time I was up I remembered distinctly, at least I can say that I walked along the line I think from between three and four miles either this time or the next, which was a week later.

Q. Well, what else did you see being done or that had been done between the 12th and the 25th?

A. A line had been run still higher.

Q. Still higher; now how high up is that?

A. I was told that it was about forty feet.

Q. I don't care what you was told?

A. I didn't measure it.

Q. You didn't measure it; did you walk up on it at all?

A. At one point.

Q. You did and you saw that a line had been run up there.

A. Yes.

Q. Now, from what you saw could you tell approximately what had been run in the shape of a line?

A. I say I should judge it was forty feet.

Q. Forty feet above the sixty-foot level?

A. Above the sixty-foot level.

Q. That would make a hundred-foot level; and how far could you see the line had been run?

A. I couldn't see it far; I saw but a few stakes.

Q. Now, what other—you spoke of another line that had been run; where was the other line?

A. I was told——

Q. Did you see it?

A. I saw it.

Q. Where was it?

A. I was told that it was twenty feet below the sixty-foot.

Q. Oh, I see; you understood, you did see it?

A. I saw it; I did not measure it.

Q. Well, it was between the sixty-foot and the bottom, the bed of the river?

A. Yes.

503 Q. Now that is all that you observed, is it?

A. No.

Q. What else?

A. There had been a line, an exploring line run near the—starting from some point somewhere near Hanging rock—Middle rock, and extending down somewhere near Mr. Thayer's.

Q. What elevation was that do you know?

A. Well, that would come pretty nearly what would be the zero line, the zero of which the Suhr line is called the sixty-foot; practically sixty feet below. I don't remember it exactly.

Q. Now, Mr. Nunn, was this under that line, the twenty-foot line and zero line, were they marked permanently, field-notes taken and kept?

A. Well, I don't believe I am in a position to say to what extent field-notes were kept of any of them, though it is my impression only——

Q. Well, were they marked permanently or were they such lines as had been run before?

A. I could not swear that the hundred-foot line was marked permanently, nor the zero, the twenty-foot I believe was marked pretty permanently for a temporary line, an exploring line.

Q. They were all temporary lines?

A. The sixty-foot was not.

Q. Those others; I didn't mention the sixty-foot.

A. Yes.

Q. Now anything else at that time?

A. Well, this time what time do you mean?

Q. October 25th?

A. Oh, the 21st?

Q. 25th?

A. No, I believe the 21st.

Q. 21st, excuse me.

A. Well a great deal of data had been prepared. I can't say that I recollect working on the ground.

Q. Well, all you saw; now when was you there again, Mr. Nunn?

A. A week later.

Q. That would be about October 28th?

A. Yes.

504 Q. Now what was going on at that time; figuring it up where you left off?

A. I beg pardon.

Q. Figuring it up where you left off the other time.

A. Several lines had been run which I did not visit; simply was reported, the results gained on them. The sixty-foot line I visited.

Q. Well, just a moment—well go ahead with the sixty-foot?

A. It was completed I then understood, and I walked along a considerable length of it, and noted that it was completed so far as I could see. There had also been preliminary plans arrived at for the temporary dam to divert the water into a temporary waterway, which was being surveyed at that time.

Q. Did you see that Mr. Nunn?

A. See what?

Q. What you are just telling about, temporary plans prepared for the waterway?

A. I saw the temporary plans for the temporary dam.

Q. Now where was this dam located on these plans?

A. This dam was to be located at a point which I do not think I can locate, since it doesn't tally with either of those points familiar in the case, but was between, was somewhat below our present dam.

Q. Well, was that up the canyon?

A. Was that what?

Q. Was that planned up the canyon?

A. Was that planned up the canyon?

Q. Yes, there where you saw it?

A. Yes, it was a preliminary plan.

Q. Who made it?

A. Why, I don't know; it was made by Mr. Suhr or Mr. Cramer, or some one of his assistants, I don't know who.

Q. Just a sketch?

A. Just a sketch.

Q. Now that sketch, the locus of that sketch was below the Middle rock?

A. Yes.

Q. Between Middle rock and the county bridge?

A. Yes.

505 Q. Now the sixty-foot level at that time, where did you go on to that?

A. I went on to it at one of two points, and I can't tell you which, tell you where I walked. I don't remember which way I went, but it is my recollection I went up on the path behind the Thayer bridge, behind the Thayer house, and I walked some distance south on that line from the point where the old trail intersects the line, the old trail leading from Thayer's house up to the old Indian fort, I believe they call it, on the bluff. I walked some distance north; and I walked practically the entire distance from that intersection to the Hanging rock, though I can't say which way I walked.

Q. To the Hanging rock?

A. Yes.

Q. You are positive of that are you?

A. I don't think I went within 500 feet of the Hanging rock; I think I was on the slope about in front of Snow Slide canyon or a little above Snow Slide canyon.

Q. Do you know that that line was marked out to Hanging rock?

A. I know that that line was marked out to Hanging rock.

Q. What was the character of the marking at Hanging rock?

A. Where there was no brush on the ground, which was true for a short distance, it was marked with surveyor's plugs; there was something in the nature of a flag or surveyor's target upon the Hanging rock, and I should say the distance of from 500 to a 1,000 feet north of that—south of that, was the first plug marked with a piece of red muslin tied upon its top and these flags occurred from that distance down as far as I went, and as far as I saw.

Q. Those flags placed on the brush?

A. Yes.

Q. So that line could be traced?

A. Yes, sir.

Q. Are you prepared to say from your own knowledge that that point at Hanging rock was marked by surveyor's plugs?

A. I am prepared to say that the line was marked across Hanging rock, and——

506 Q. By surveyor's plugs?

A. Yes sir.

Q. You remember that distinctly do you?

A. I do.

Q. Now, was you up there again after that?

A. Well, I believe the date of which we spoke last was the 28th of October, was it not?

Q. How was that?

A. The 28th of October was the date of which I spoke last, was it not?

Q. Yes.

A. I think, although I am not sure, I think it is possible that I made one trip up the canyon after which I don't seem to have any recollection of.

Q. Which way did you go into the canyon at that time?

A. On the 28th?

Q. Yes.

A. I drove up from here.

Q. You drove up from here; now was the Suhr line, sixty-foot line ready for work at that time?

A. Was what?

Q. Was the sixty-foot line ready for work at that time?

A. Work, in what way?

Q. Work upon the ground?

A. Excavating?

Q. Yes.

A. No, sir.

Q. Well, it was just a preliminary trial line at that time?

A. No, it was part of the permanent, but the permanent work required more than a line.

Q. Well, but you hadn't had your meeting of your four officers at that time, had you?

A. The meeting of the four and the trip down through the canyon occurred on October the 25th.

Q. October 25th?

A. And it was during that time of the meeting, following that time that I noted the Suhr line as I have spoken

Q. I have asked you on October 12th, October 21st, and October 28th, is the dates that you gave me that you was up in the canyon?

A. Yes, and October the 21st was the time when we drove down through the canyon with the officers of the company.

507 Q. Oh, I didn't understand you; now you did come down the canyon from Park City?

A. Yes.

Q. Now, when you come down through the canyon, I suppose you noted its characteristics and topographical features, and everything of that kind?

A. Yes.

Q. With a view of what its capabilities, etc., would be, did you not?

A. Yes.

Q. You noted that quite fully?

A. I think so.

Q. You came down the road which ran along the side of the canyon?

A. Yes.

Q. Known as the county road?

A. Yes.

Q. It runs, after you get within four or five miles of Middle rock or Hanging rock, down near the edge, comparatively near to the water in a great many places, does it not?

A. Yes.

Q. The water backed up there for five miles would cover the county road, would it not?

Mr. HENDERSON: Just a moment, I object to that as not being cross-examination.

The COURT: There? Where?

Mr. WEDGWOOD: The bed of the canyon.

The COURT: You mean from Hanging rock or Middle rock?

Mr. WEDGWOOD: Oh, I said from Hanging rock or Middle rock, for four or five miles.

Mr. HENDERSON: They are practically the same, but he is talking about flowing the county road; that hasn't been brought into this testimony at all.

Mr. WEDGWOOD: Well, we will not press the question.

Q. Now, Mr. Nunn, at any time that you was there, was there any work done upon a dam at Hanging rock or Middle rock?

A. Was there any work done upon a dam?

Q. Yes, on the ground, I mean?

A. Not that I recollect.

Q. Was there any done above the dam?

A. By work you mean something that will show on the ground?

508 Q. Yes sir.

A. Well, nothing more than the work what was done by the surveyors in cutting brush, and putting their stakes, etc.

Q. Now you testified that you wasn't prepared to swear that there was any brush cut up to Hanging rock?

Mr. HENDERSON: Well, this was up to what time?

Mr. HARKNESS: Well, any time.

Mr. WEDGWOOD: Well, up to October 28th, 1895. You testified to that I believe?

A. That I wasn't prepared to swear that there was any brush cut at Hanging rock? No, I believe I said that I wasn't prepared to say that there was brush cut or holes dug between the abutments.

Q. Yes, that is what I mean?

A. Yes.

Q. Now, Mr. Nunn, you say that on the 21st day of October—25th day of October, or first, which was it, you came down the canyon, the 21st, from Park City?

A. Do you mean when I came with the officers of the company?

Q. Yes?

A. I believe it was the 21st of October.

Q. Now, between the 21st you say that on the 21st day of October, up on the side of the hill there the officers of the company meeting

with you and the attorneys, and its agents, decided upon the plan for utilizing the canyon, and damming the canyon?

Mr. HENDERSON: I object to that as assuming what the witness has not testified to.

Mr. WEDGWOOD: Well, Judge, he sure answered that to you: now here is his exact language in answer to that question of damming the river at that time: "It was determined at that time that it was feasible and a good scheme."

Mr. HENDERSON: Yes, of course he did, and now just compare that with the question that you have asked; he said when he was asked the question that you have asked, expressly he says "I learned
509 that that was so, but I wasn't present just when that was said;" that is what he said exactly.

The COURT: I think that is correct.

Mr. WEDGWOOD: But he said it was determined there. What was determined there?

The COURT: Let the court get the exact question.

Question read.

Mr. WEDGWOOD:

Q. I will change that there. It was determined by the officers of the company in your presence that it was feasible and practicable to utilize the canyon by raising the water up to a height of sixty or eighty-five feet; you testified to that substantially, did you not?

A. I did.

Q. Now as a fact, from that time down until October 28th, 1895, there was nothing done in manual work, towards erecting a dam?

A. You mean during that week?

Q. No, I mean during that year.

The COURT: October '96, you mean?

Mr. WEDGWOOD:

Q. You was there again in—I will ask this question, perhaps I have got that mixed up in my own mind; you wasn't here again until February 1897?

A. No.

Q. During the year 1896, you wasn't here at all?

A. No.

Q. During the year '97 you went up the canyon again?

A. Yes sir.

Q. Now, what did you find there at that time in addition to what you have said, in the line of a dam?

A. That was in February——

Q. 1897?

A. '97, last February; what I found there last February?

Q. Yes, that had been done since you were there in 1895?

510 The COURT: A year ago last February?

A. Yes, a year ago last February.

Mr. WEDGWOOD: In the line of a dam?

A. Well, I don't believe I could—I have only been there once and

it was a very stormy day, and I stayed there but a short time between the abutments.

Q. Well, you are the chief engineer of the company?

A. Yes.

Q. You have spent a good deal of time in the canyon during '97?

A. Yes sir.

Q. You had the same interest in the year 1897 that you had in 1895?

A. Yes.

Q. And so far as you know, after this meeting on the side hill in October 25th, '95, up to February, '97, nothing had been done in the way of erecting a dam?

A. No, I wouldn't——

Mr. HENDERSON: Wait a moment; I object to that as assuming a fact that has not been testified to, but has been expressly testified the other way.

The COURT: I understand it is to be a direct question on that and not assuming: he can answer the question.

Mr. HENDERSON: Well, if it is asked as a question for him to answer and not assuming, I have no objection to it.

A. In the short time that I was there——

Mr. WEDGWOOD:

Q. Oh, just answer my question, yes or no.

The COURT: And then you can explain, Mr. Nunn.

A. Read the question, Mr. Reporter, please.

Question read.

Mr. HENDERSON: Well, now, if the court please, that does assume

511 No. 123. R. G. W. *vs.* W. W. Ferguson, *et al.* At Provo City, Utah. Filed August 26, 898. See other side. —— ——, clerk.

512 Filed Jan. 10, 1899.

LILBURN P. PALMER,
Clerk Supreme Court, Utah.

At Provo City, Utah.
Filed August 26th, 1898.

—— ——, *Clerk.*

that it had not been done.

Mr. WEDGWOOD: I will modify it.

Q. So far as you saw by anything upon the ground, manual labor or anything of that kind?

A. No, I can't say that is right.

Q. Had anything been done?

A. Yes.

Q. What?

A. A great deal of brush had been cut, holes had been dug, and the rock cleared of earth, to some extent.

Q. Well, now what time was you up there in 1897?

A. I can't give you the date.

Q. In February?

A. No, I wasn't there in February; I came to Provo in February; I didn't go up the canyon until March or the early part of April.

Q. Well now, tell me what had been done?

A. A good deal of brush had been cleared, holes had been dug——

Q. Well—well go ahead?

A. And the abutments, one or both, earth had been cleared off, and considerable showing of work that way.

Q. Now, how much had been cleared and where?

A. I can't state how much; I wouldn't know how to express it; territory or in any other way, for as I say I was only there a few moments, and it was a very bad day.

Q. Yes, but you are prepared to say that certain things was done, can't you tell where the location of that brush was?

A. Sufficient to say that, standing upon one of the abutments and looking across to the other, I had no brush in the road, could see where the dam would come.

Q. And that is about 300 feet across?

A. I don't remember exactly.

Q. And the river takes up a portion of it, don't it?

A. I believe it does flow through there.

Q. What do you mean by a good deal of brush, that is an easy way——

513 A. Well, there was quite a bit of territory in which brush had been removed, there was a great big stack of brush piled up ready to burn.

Q. Only one stack of brush?

A. Yes, there was a dozen or 15.

Q. Well, dozen or fifteen, which?

A. I wouldn't say whether there was a dozen or fifteen

Q. Well, answer the question, of about how large the space was.

A. Well, I can only guess at it, that standing up there and looking down it was quite clear in front of me; I should say a hundred or 200 feet wide possibly it might be 600 feet.

Q. That above or below the rock?

A. Above what?

Q. Above or between the rocks?

A. Oh, above, or down the river?

Q. Yes.

A. I should say it was about equally divided between.

Q. You should say it was about equally divided between?

A. Yes.

Q. Now, what had been done in the way of holes?

A. I saw masses of earth over the holes in the ground. I did not examine them to see what had been done, or what size they were.

Q. May have been a foot deep, or may have been twenty?

A. Well, I think I would have seen the bottom of them if they had been but a foot, but it might have been twenty.

Q. Now, what had been done on the rock?
A. The cutting had been made in the rock and the earth thrown each way so as to practically clear the rock that side.
Q. Which side?
A. The opposite side from which I was standing, and I was standing on the north side of the river.
Q. Well, what did you see done on the north side?
A. Where I was standing?
Q. Yes.
A. I don't recollect that I saw anything. I can't be sure that there was or not.
514 Q. Don't think there was anything done on the north side?
A. I don't know; I don't recollect at all.
Q. And didn't go over on the south side?
A. I simply stood on this rock and looked.
Q. And you saw some earth had been thrown off the top of the rock, is that it?
A. Yes.
Q. Was there earth on the rock?
A. The rock that I was standing on?
Q. No the other one?
A. There had been evidently.
Q. How much of a quantity?
A. Oh, I don't know.
Q. Did you see any railroad work at the foot of the bluff?
A. Yes.
Q. Which way?
A. Well, my recollection is that there was, that the——

Mr. HENDERSON: What do you mean by work Mr. Wedgwood?
Mr. WEDGWOOD: Work on the ground, the result of manual work of some kind?

A. Well, it looked as if the natural slope of the river side had been disturbed, and the river bank, below, around for a distance, both above and below.
Q. Well, did it show that it was a railroad grade, or anything of that kind?
A. I don't remember that it looked specially like a railroad grade.
Q. Or like railroad work?
A. I don't remember much of it at that time, knowing that it was railroad work.
Q. Now, Mr. Nunn, up to that time, you being the chief engineer of the company, had there ever been a plan prepared for a dam between those two points such as engineers put there for work, between the Hanging rock?
A. Up to what time?
Q. The time you came here in February, 1897.
A. Yes, there had been several.
Q. Several plan*d* prepared?

A. Yes.

515 Q. Where are they?

A. Where are they?

Q. Yes.

A. I am sure I don't know.

Q. What kind of plans were they?

A. Sketches which were prepared I suppose to express the opinion of the maker as to a pretty good way of doing that thing.

Q. That is, there has been several sketches prepared to illustrate ideas of different men?

A. Yes, sir.

Q. Now, had there any plan been adopted up to that time for the building of the dam either at Hanging rock or Middle rock?

A. There had been no plans submitted to the State engineer which would — necessary before adopting.

Q. Had there been any plans adopted by your company?

A. Couldn't be adopted, no, sir.

Q. Then down to that time, from the time that it was stated in your presence that the scheme was quite feasible, to do that, from October 21st, '95, down to February, '97, there had been no definite plan adopted, placed upon paper for the building of a dam of any kind?

A. Well, what do you mean by adopted on paper?

Q. I mean—you are the chief engineer of the company?

A. Yes, sir.

Q. Did you ever approve any plan which had been projected upon paper, the same as engineering work is done?

A. I had approved of the feasibility of several plans.

Q. Well, I know that may be; did you ever approve of a definite plan to be adopted?

A. I approved of several.

Q. For its construction?

A. I approved of several.

Q. Was there a plan made that engineers call plans; you have just said that there was several sketches to illustrate the ideas of different people; now I want to know if from those sketches, a plan was ever made?

A. Do you mean the final details?

Q. Yes, sir.

A. No, sir.

516 Q. Then I say that no plan showing the final details was ever approved by you or adopted by the company for the building of a dam?

A. No, sir.

Q. Now I want to ask you if you have ever approved a plan, that is a particular, a plan for a dam and the company have ever adopted that plan?

A. I just stated the company had never adopted a detailed plan.

Q. Well, a detail, or a plan generally of the character of the dam, whether masonry, clay, crib, toe dam or anything else?

A. What do you mean by approved?

Q. I mean that the company has passed upon it, and said this is the kind of a dam we will build there.

A. No.

Mr. HARKNESS:

Q. Mr. Nunn, I would like to fix one point; in contemplating a 25-foot dam, or any other dam, I understand you to say it is to be above high water?

A. Yes.

The COURT:

Q. You mean, Judge Harkness, that many feet above high-water mark?

Mr. HARKNESS: That many feet above high-water mark.

Q. Now, how are we to find out here, Mr. Nunn, where high-water mark is or what point you refer to?

A. How are you to find out?

Q. Yes, how are we to know?

A. Well, high-water mark varies at different points in the river; you can get it in the same way we have at the different points.

Q. Have to go up there and wait for high water, wouldn't we?

A. No, sir.

Q. How can we get it?

A. You can take the marks that the water leaves along the stream, the edges of the stream, and the evidence of the old-timers
517 along there, where the very high water comes, and arrive at that in the same way that we had to arrive at the maximum, against which we must protect ourselves.

Q. Well you never have fixed any definite point then by measurement as the point of high-water mark to make your data from?

A. Not by measuring above the high water, for we have never been here when the water was at the highest that we have reason to believe it has been in years.

Q. Do you know what the difference is between the high and low water up there?

A. It varies between different years of the river.

Q. There is no fixed difference?

A. It depends upon the shape of the river at the point.

Q. Well, I say, there is no fixed difference for the whole river?

A. Oh, no.

Q. Is there any difference between medium water and high water?

A. It follows the same laws as high water.

Q. Then there is no way which we can get to it here, by description, any definite point which the high water reaches, or any number of feet difference between low and high water mark; you may have to go to the ground, according to your explanation, as I understand it?

A. Well, it is my impression that if that were specially desired, the variation in the stream at any definite point could be gotten at very closely, but not exactly except by going to the ground. I

think Mr. Searle could give it approximately for almost any point which you would desire to have it.

Q. Well, that is all; I just wanted to see if you could give me a definite point to compute from?

A. I don't think I have.

Recess until 2 o'clock p. m.

Resumed session.

518 P. N. NUNN, recalled for further cross-examination.

Examined by Mr. WEDGWOOD:

Q. Mr. Nunn, in this contemplated dam at Hanging rock or Middle rock 85 feet high, would extend clear across the canyon, would it not?

A. Yes.

Q. That is it would be a complete wall across the canyon from one side to the other at an elevation of 85 feet?

A. Fill for sixty, wall for 25.

Q. I didn't ask you that, Mr. Nunn; I just asked you the question, It would be a wall across the canyon?

A. No, it wouldn't be a wall 85 feet high across the canyon.

Q. It would be an obstruction in the canyon, raised 85 feet above the present level of the water, would it not?

A. Yes.

Q. Now, of course after that construction was raised there the flow of the river above what amount you took in your flumes would have to be arranged for, would it not?

A. In the sense of an overflow you mean?

Q. Yes.

A. Yes.

Q. In the sense of something, I don't know what it is, that is what I want to find out. In the extreme high-water season, what portion of the river would your flume take, carry?

A. Well, I suppose there — seasons, short periods at which the flow into the reservoir would be ten or fifteen times, I have forgotten just what the maximum is.

Q. But in building a dam or obstruction of that character across the canyon, the extreme high water, the extreme maximum flow would have to be provided for, would it not?

A. Yes.

Q. Did you ever see the flow of the river in its extreme high water?

A. I don't think I have; not its very extreme that had been known.

Q. You have seen it in high water?

A. Yes.

Q. A large volum- of water?

A. Yes.

519 Q. A large volume of water?

A. Yes.

Q. What method could be provided to take care of that extreme high water?

A. Simply let it flow over the top of the obstruction as it is called.

Q. Flow over the top of the obstruction?

A. Yes.

Q. Now, I will ask you, Mr. Nunn, in your judgment what the width and depth of the flow at extreme high water would be over the obstruction?

A. The width of the flow would be equal to the length of what we call the crest of the dam or weir, and I think that would be something over 400 feet.

Q. By how wide or how deep?

A. Well, I haven't calculated that. I can get the figures and give you about the depth; let me see—oh, I should say about five feet of water.

Q. Then there would be a stream of water 400 feet wide and five feet deep flowing over the top of that dam?

A. Five feet measured vertically on the crest.

Q. Yes, on the crest; now, Mr. Nunn, supposing that is right, when it is done, the stream measured, do you mean *do you mean* if a dam was put in of masonry the same as has been suggested here, you can drop an overflow 400 feet wide and five feet thick, over there, and fall to the foot of the dam?

A. No.

Q. What do you mean?

A. Four feet there; there is a gain of velocity here, it will come thinner and thinner as it goes down. It would be a very thin sheet below.

Q. But the whole volume of water that goes over here has got to strike the bottom beyond, falling—having 85-foot fall there with that kind of a dam?

A. Strike it, you mean a direct fall.

Q. Yes.

A. No, sir.

Q. How would it strike it?

A. From all that we have talked of this dam——

520 Q. Well, I *am* asking you of this kind of a dam.

A. You mean these proportions here?

Q. Well, draw any proportion you want to of a dam across the canyon.

Mr. HENDERSON: Such a dam as he has in mind?

Mr. WEDGWOOD:

Q. Well, I am asking about a masonry dam now.

A. Well, that would be more the shape of it, and it would flow down in this way (illustrating).

Q. It would flow down an incline?

A. Yes, sir.

Q. Now, maybe I am in error, Mr. Nunn, I drew that from your

other witnesses here; I drew that in what I supposed were the proportions of the dam. Will you please mark on there the length of the foot of the dam, the base of the dam, such a one as that?

A. Such a one as we have heretofore advised?

Q. Yes, such a dam as would be a practicable dam there in the canyon?

A. If that is 85 feet——

Q. The base I am talking about.

A. The base of such a dam, something over 155 feet, something over that.

Q. Mr. Searle gave it as 90 feet, that is the *baises* that I was putting it on.

A. Well, Mr. Searle's figuring doesn't agree with me then.

Q. Well, that is about as near as you engineers have got together on anything?

Mr. HENDERSON: Oh, who has been able to get together?

Mr. WEDGWOOD:

Q. As your engineers, Mr. Searle and Nunn.

Mr. HENDERSON: Well, I object to that.

The COURT: Let it go out as immaterial.

Mr. WEDGWOOD:

Q. All right; as I understand, Mr. Nunn, on the other scheme, the building the dam there would be a toe, as it has been called, put in three-quarters of a mile below the stream, and that
321 backed up, and a toe put in some distance above that, and that backed up, and another toe here and that backed up, etc., until the height of 85 feet is reached, is that it?

A. Something of that kind.

Q. Something of that kind; now there would be the same overflow there?

A. Yes.

Q. Now, how far apart were those toes, as they have been termed here?

A. Well I suppose it depends upon who is engineering it.

Q. Well, has there been, has it been reduced close enough to a plan to approximate how far apart they would be, even in your mind; if there has been, tell us.

A. No, I can't say that there have; it might follow either one of three perhaps, it is very common.

Q. Well at different distances there would be that volum- of water then flowing from one to the other, in high water, would there?

A. Yes.

Q. Now do you mean to be understood as saying they would not be any of them within your contemplation upon bed rock, except it might be that one, if you found bed rock there as you have ascertained it here?

A. As I described the proposition?

Q. Yes.

A. No.

Q. Do you mean to be understood as *as* saying — an engineer that a dam of that kind would be a practicable, feasible dam, and would stand the overflow in extreme high-water season?

A. It certainly would.

Q. It certainly would?

A. It certainly would.

Q. That is your judgment is it, Mr. Nunn; now, Mr. Nunn, there is a wagon road runs up South fork, is there not?

A. Yes.

Q. And it runs near the bed of the fork?

A. At places, I believe.

Q. At places, now, how far back would it flow the water, an 85-foot dam in South fork?

A. The plan shows; I am not prepared to say from memory.

522 Mr. WEDGWOOD: I think Mr. Searle testified 1,500 feet, did he not?

Mr. HENDERSON: Well, he testified what it was; I don't recollect.

Mr. WEDGWOOD:

Q. How wide would the surface of the water be raised under a height of 85 feet in Provo canyon opposite the mouth of South fork?

A. I can't give the figures for that; the plan showes.

Q. Well, approximately?

A. Well, I don't remember at all.

Q. Have no memory at all?

A. I didn't say I had no memory at all.

Q. Well, you are the chief engineer of this company?

A. I believe so.

Q. You are very familiar with this?

A. Somewhat.

Q. And this is a decided undertaking with you?

A. Yes.

Q. And you can't tell how wide it would be across the surface of the water, raised 85 feet opposite South fork?

A. I don't remember.

Q. Well, can you tell approximately?

A. I don't think so; I should hate to try.

Q. Well, can you tell within three or 400 hundred feet?

A. I don't think so.

Q. Well have you got a map here that you can refresh your memory on to find out?

A. I think so.

Q. Well, better do it then?

A. I don't see the map here; shall I go and get it?

Q. Well, you can get it and come back again. Oh, one question while I think of it; did you bring in your plans, figures, which show your estimate of the 25-foot rais-, and where it was, that we spoke about before dinner? You said you would get —?

A. I didn't understand I was to get it.

523 Q. Yes, you said you thought you could find it somewhere, and you said you could get it.

A. Well, I beg pardon, I neglected to get it then.

Q. Well, I wish you would get it.

A. All right.

Q. Now, Mr. Nunn, in building such a dam as you suggest, or I will ask you first, ask you at Hanging rock the walls of the canyon are precipitous between those rocks, are they?

A. Yes.

Q. For how high?

A. Well, there is a break at about 62 or '3 feet, I believe, and then the rock crops out for a distance of I should say fifty or sixty feet further.

Q. Well, up at the height*h* of 85 feet, it is rock wall on both sides at Hanging rock?

A. Rock wall on one side and some earth over it on the other.

Q. You don't know what there is underneath that earth?

A. Why, the rock crops out above and below, and I think it is the same rock.

Q. You think that is just a hollow filled in with earth?

A. Yes.

Q. So the walls are presipitous and rocky at that point?

A. They are.

Q. And the ground rises up above these rocks on either side, does it not?

A. Yes.

Q. And there is canyon walls, with the exception of South fork and North fork, which are at least the same height as the rock at least up to 85 feet right straight up the river?

A. Oh, no.

Q. Well, it must be, Mr. Nunn; because if it didn't, if you raise the water to that height, 85 feet, it would not be confined?

A. Oh, I understood you to say, bare rock walls?

Q. No; there is canyon walls on the side?

A. Yes.

Q. I say, at least that height*h*; now is the same thing prac-
524 tically true down at Middle rock?

A. No.

Q. In what regard are they different—is there a difference in the location?

A. At Middle rock the ground recedes much more easily, and directly or almost directly opposite Middle rock, upon the north side of the canyon, a draw comes down known as Snow Slide canyon.

Q. That is, it comes down at right angles, nearly, with the river, approximately at right angles?

A. Approximately, yes.

Q. What you mean is that the walls are of little bit lesser slope?

A. A great deal less.

Q. How much lesser slope?

A. Well, I should say they perhaps have half the slope.

Q. But everywhere there is a slope right up until you come to a perpendicular height above 85 feet?

A. Yes.

Q. Now, Mr. Nunn, in constructing a dam or obstruction in the river whatever you call it, of this character, what would be done with the water while the dam was being constructed?

A. Do you mean how would it be gotten rid of?

Q. Yes.

A. It would be allowed to flow right over.

Q. Would be allowed to flow over all of the time?

A. Yes.

Q. I understood you to say that it is practicable to build a dam in the river and allow the water to flow over while the dam is being built?

A. You don't allow the water to flow over the section you are working upon, but you build it up a section at a time.

Q. Built it up section at a time; there is no way *fo* turning the water so that it would not flow over the work as it is progressed is there?

A. No.

Q. You say it is practicable to build up that dam and allow the water to flow over?

A. Certainly.

525 Q. As it is being built all the time; that is your judgment?

A. Why, certainly.

—. I wish you would look up that map.

R. E. L. COLLIER, called and sworn for the defendants.

Examined by Mr. HENDERSON:

Q. Where do you live, Mr. Collier?

A. Salt Lake City.

Q. Was you formerly in the employ of the Rio Grande Western railway?

A. Yes, sir.

Q. Did you in some testimony that was given here the other day, these books that I now show you were used, and your name or the name of somebody called Collier was used as having something to do with them; and I will ask you if you are the man?

A. Yes, sir.

Q. Is the handwriting on the outside of them yours?

A. Yes, sir.

Q. On both of them?

A. Yes, sir.

Q. Now, calling your attention to the one that is number 465, I will ask you if that contains the location of the line of the railroad company, as you surveyed it through the canyon?

A. Yes, sir.

Q. And you made the minutes in that book, didn't you?

A. Yes, sir.

Q. All of them?

A. Well, there is——

Q. Well, I will ask you this question in leafing them through hurri-dly do you see anything that you didn't make?

A. Yes, sir.

Q. Well, where, what?

A. Well, the distance between these points, I didn't put in, (indicating).

Q. Let me see on what page you——

A. Well, it is all through, just length of curve, length of tengent, that isn't my handwriting.

Q. These other figures that run up and down the page?

A. Yes, sir.

Q. And on the margin?

A. Yes, sir.

Q. They are put in through here considerably, I notice?

A. Yes, sir.

526 Q. And these are not in your handwriting?

A. No, sir.

Q. But the minutes themselves, notes——

A. (Int.) But the notes themselves are in my handwriting, yes, sir.

Q. They are in your handwriting, and you made them?

A. Yes, sir.

Q. Now, you are an engineer, are you?

A. Yes, sir.

Q. Did you have charge of this work when it commenced?

A. Well, Mr. Baxter had charge of it.

Q. Well, I don't mean that you hae supervisory charge, but did you have immediate charge?

A. Yes, sir.

Q. Doing transet work, was it not?

A. Well transit and level.

Q. Transit and level?

A. Yes, sir.

Q. About how much of transit and how much level?

A. Well, about two-thirds I guess transit work, two-thirds or more.

Q. And the balance of it was level?

A. Yes, sir.

Q. Just indicate to me in a general way, not with great particularity, but that part of it that was run with level.

A. Well, levels were run over the whole line.

Q. Well, that was only level, that wasn't transit work.

A. I don't believe I quite understand you.

Q. I understood you to say that part of it——

A. About a third of the time was put in in running the levels.

Q. Oh, yes, and the balance of the time in running the transit.

A. Yes, sir.

Q. Now, you commenced the survey, did you?

A. Yes, sir.

Q. Can you tell me what date it was commenced?

A. It was commenced on the 24th day of March, 1896.

Q. And at what point?

A. That was at the crossing of the U. P. track, where the U. P. crosses the Rio Grande railroad.

Q. Was it commenced on that day there, or was it commenced on that day at the depot?

A. Well that day we commenced there.

527 Q. Well, the first day was spent in getting the proper data to commence with from that point?

A. Yes, sir.

Q. Yes, so that on the 25th you started from where it diverges from the main track; that is correct, isn't it?

A. Well, we left the main track on the 25th; all this gap was run in on the 24th on the main line.

Q. Yes, on the 24th?

A. Yes, sir.

Q. How much work did you do on the line off from that on the 24th?

A. I don't think we did any on the 24th.

Q. Well I say then substantially you commenced to work from the main line on the 25th?

A. Yes, sir.

Q. Yes, and you carried that through and ran it along up the canyon?

A. Yes, sir.

Q. Now, can you tell me when you arrived at a place that is now called Hanging rock? I don't know as you know it by that name I will call it to you from the book—I will ask you first how many men you had with you?

A. I believe five, with myself.

Q. Five with yourself?

A. Yes, sir.

Q. And that is the force that you had there for some time was it not?

A. We had that force, up to Thayer's.

Q. And then more or less?

A. We had I believe it was one more.

Q. One more at Thayer's?

A. Yes, sir.

Q. Now, do you remember of meeting Mr. Searle up there?

A. Yes, sir.

Q. And do you remember a place up, way up above Thayer's, I don't know a mile or so perhaps, where there is an abutment of rocks on both sides?

A. Yes, sir.

Q. And do you remember a place about a thousand feet down below that on the stream?

A. Where you divert the water from the river into the canal; you mean that point?

Q. Where that was talked of?

A. Yes, sir.

Q. You remember that point?

A. Yes, sir.

528 Q. A place that is called Middle rock?

A. Well, I didn't know it by that name.

Q. You didn't know it by that name; well, that is about a thousand feet down below that point of rock?

A. Yes, sir.

Mr. HARKNESS: The diverting dam is three or 400 feet further.

Mr. HENDERSON: Well it is now. What day did you get there?

A. Let me see; I should say it was the 10th of April.

Q. The 10th of April?

A. Yes, sir.

Q. That you arrived there?

A. Yes, sir.

Q. And is that the time when you saw Searle?

A. I think it was, about that date.

Q. Well——

A. It might have been a day earlier or might have been a day later.

Q. But it was when you arrived at that point?

A. Yes, sir.

Q. And upon your arrival there?

A. Yes, sir.

Q. Do you know what he was doing when you first saw him?

A. Well, he was coming home.

Q. He was coming home?

A. He had been to work above, and was coming home and met me there.

Q. Met you there?

A. Yes, sir.

Q. Did he tell you anything at the time about what he was doing up above?

A. Well, he told me that the company was going to put in a dam there of sixty feet high.

Q. Yes, he told you the company was going to put in a dam there sixty feet high?

A. Yes, sir; at that point.

Q. How?

A. At that point.

Q. At that point?

A. Yes, sir.

Q. And did he tell you anything about where? What he had been doing above?

A. No, I don't think he did.

Q. But he was coming down from above?

A. Yes, sir.

Q. On the way down from up above?

A. Yes, sir.

529 —. On the north side?

A. Yes, sir.

Q. Now, I ask you—well, let me see, I take this other, I show you this book, No. 1, and ask you if that was also kept by you?
A. Yes, sir.
Q. That is your handwriting is it?
A. Yes, sir.
Q. I show in that book on page, what is that page?
A. 48.
Q. On page 48, I show you a place there where you have marked "628, cross-line claimed by electric plant," and ask you if that is near the place where you met Mr. Searles?
A. Well, that is very close to it.
Q. It is close to that place?
A. Yes, sir, it is pretty close to that place.
Q. When you got into the canyon and got to work did you find any other party of surveyors or workmen there?
A. I saw Mr. Searle, was the only party that I saw.
Q. The only party?
A. Yes, sir.
Q. Didn't you during the survey, didn't you find another camp or any other work going on up there?
A. Oh, yes.
Q. Yes, that is what I am talking about?
A. Yes, sir.
Q. Now, what did you find in that respect?
A. Well, I found I think a camp of about four tents at Thayer's place, four or five tents, and I think something like twenty or thirty men possibly, working there.
Q. Working right there were they?
A. Oh, no, they were working above on the flume.
Q. Working above on the flume?
A. At just about this point 638 of our line.
Q. Well, now, that is some below that point where you met Searles, wasn't it?
A. Yes, sir.
Q. And they were maintaining a camp there, were they?
A. Yes, sir.

530 Mr. WEDGWOOD: We object to it as leading. This is their own witness.
Mr. HENDERSON: Well, that is withdrawn; it is preliminary.

Q. Now, did you make any application to that camp to board your men there?
A. I believe I did.
Q. Did you secure it?
A. No, sir.
Q. Well, for what reason?
A. Well, they said they were crowded for table room, etc.
Q. Couldn't accom-odate you?
A. Yes, sir.
Q. And now I want to inquire if at this time when you got up there up to that place where Searles was, if you in making your in-

vestigations along there, and making your notes, you had any occasion to go around up the side of the canyon in any way?

A. No, sir; not at all.

Q. Not on that line?

A. No, sir; I did it in May on the located line.

Q. Yes, you did it in May?

A. Yes, sir.

Q. On the located line?

A. Yes, sir.

Q. But you didn't on the first one up there?

A. No, sir.

Q. At that time you were simply running through in advance, were you not, the angles?

A. Yes, sir.

Mr. WEDGWOOD: We object to it as leading.

Mr. HENDERSON:

Q. Well, what were you doing? I will withdraw it. What were you doing at that time when you met Mr. Searles up there?

A. We were running an angle line, cutting brush.

Q. And had been engaged in that up to that time, hadn't you?

A. Yes, sir.

Q. And did you—now, afterwards what did you do?

A. After we got through with the angle line?

Q. Yes?

A. We returned I believe to the U. P. crossing, or where we left the railroad.

531 Q. Yes.

A. That is in a few days after that; we left——

Q. Yes, and then what did you do?

A. I stayed in a few days after that we left, left Ferguson's and came back and located the line.

Q. And did what?

A. And made the location.

Q. And made the location?

A. Yes, sir.

Q. What do you mean by saying that; what did you do to do that?

A. Well, we put the curves in.

Q. Anything else?

A. Well, that was about all I believe, the location, ran levels and everything to make it complete, and slopes and everything necessary for an estimate.

Q. Now, let me see, if I understand it, you first started from down here, and ran an angle line right up through to the Ferguson place?

A. Yes, sir.

Q. And then you came down here where it leaves the railroad and there you commenced and simply put in the curves until you went up there?

A. Yes, sir; and worked back up there again.

Q. And worked back up there again. Now, when you worked back up there again on this line to this place where you met Searles, at Standing rock and along there, about what date was that?

A. With the located line.

Q. Yes.

A. I should say about the 16th or 18th day of May.

Q. At that time did you have occasion to take notice of the sides around there?

A. Yes, sir.

Q. As you went along up, you made investigation then, did you?

A. Yes, sir.

Q. Did you notice or see anything of a line of stakes or a survey run along on the north side of the canyon up approximately about sixty feet?

A. I saw some flags below, that is between Thayer's and Provo, about that height, (illustrating).

532 Q. About that height?

A. Yes, sir.

Q. Now, from there up did you see any stakes at all set up on about that line?

A. I don't know as I did, that is, there was a gap from a point about a mile below Thayer's so, well, I don't know but what there was two or three or four miles possibly in there that there was no section lines, and I had no occasion to go up there.

Q. You had no occasion to go up there?

A. No, sir.

Q. And there you didn't see them?

A. No, sir.

Q. Well, now, did you go up towards the other end, have occasion up near what I have called here Hanging rock, did you have occasion to go up the sides?

A. No, sir; I believe that is unsurveyed land too.

Q. That is unsurveyed land?

A. Yes, sir.

Q. So you had no occasion to go up there and look for section corners?

A. No, sir.

Q. Or section lines?

A. No, sir.

Q. Did you at any time notice any stakes set around on either side of the canyon up in there above Hanging rock?

A. Yes, sir.

Q. When?

A. Well, that must have been along about—well, when I noticed that particularly was near South fork I believe, when we got up there he had the sixty and the 85 foot stakes in.

Q. Yes, who was putting them in?

A. Well, I couldn't say who was putting them in; some men in charge of Mr. Searle.

Q. Well, Mr. Searle seemed to be there in charge?

A. Yes, sir.

Q. Now, did you see these stakes set on both sides of the canyon?

A. Well, at this point I don't believe I saw them on the east side; but I did on the east side further up, along where they met that head of the reservoir.

Q. Well then, you did see them on both sides of the canyon?

A. Yes, sir.

533 Q. Now, and along about what date was that?

A. Well, that must have, I should say about the latter part of June or May.

Q. The latter part of May?

A. Yes, sir.

Q. Now, I want to inquire if at any time from the time that you commenced this work you found any indications whatever from the time when you left on the morning of the 25th of March, when you left the old road, if going up through you found any indication anywhere at any time or any spot or any place, of any railroad or railroad line ever having been surveyed or marked in any way up through the canyon?

A. Well, I saw old stakes even below Thayer's, I saw some old stakes; looked like they had been put in six or eight possibly twelve years ago.

Q. How long along there did you see stakes of that kind?

A. How long a distance?

Q. Yes.

A. Oh, possibly I saw three or four in all.

Q. Three or four?

A. Yes, sir.

Q. Was there anything to indicate whether it might have been a survey for water-course or a railroad?

A. Well, I was impressed that it was a railroad survey.

Q. How was that?

A. I was impressed it was a railroad survey, on account of the grade, etc.

Q. Did you have any knowledge of it except from what you saw, stakes?

A. No, sir.

Q. You heard of none?

A. No, sir.

Q. You did hear did you not that some ten or twelve years before that that there had been?

A. I had heard that.

Q. Well, you had heard that there had been surveys up there for reservoir and water-courses hadn't you?

A. Yes, sir; I have heard it.

Q. Some ten or twelve years ago?

A. Well, I don't know about that.

534 Q. You don't know about that; did you as you went up there see at various times as you went along indications of surveys, and stakes that had been set within the last year or two years, of explorations made along up there?

A. Yes, I saw stakes.

Q. Saw stakes and marks?

A. Yes, sir.

Q. Indicating explorations, did you?

A. Yes, sir.

Q. Did you see them indicating more than one line of explorations?

A. Yes, I saw several.

Q. Saw several?

A. Yes, sir.

Q. What was the indication about how long that work had been done before?

A. Well, didn't seem to be long; seemed to be new stakes.

Q. Well, indicat- now in years?

A. Well, less than a year I would think.

Q. This place where the abutments were, these stone abutments when you got up there, did you notice anything indicating a clearing away there in any way?

A. Yes, sir.

Q. What?

A. Well, all the brush was cut and I believe it was piled up; it hadn't been burned.

Q. Now, let me understand; give your best judgment. I don't suppose you measured it so as to give any accurate judgment, but tell me about how far those abutments were from each other, from one to the other?

A. From one side of the canyon to the other?

Q. Yes, from one side of the stream to the other?

A. Well, I should think they were somewhere between 700 feet and a thousand feet.

Q. That would be an impression on your mind as you remember it?

A. Yes, sir.

Q. The river ran between?

A. Yes, sir.

Q. How much of a space did the river bed actually occupy?

A. Possibly sixty or seventy feet.

535 Q. Now what covered the balance of that ground?

A. I think it had been in dense brush and willows.

Q. Dense brush, now how wide a place between these rocks, running from the rocks down the river, how wide a place of brush had been cut and cleared away?

A. Oh, I should think 125 ft.

Q. Did you see any other indications there of work having been done?

A. No, I don't know as I did.

Q. Don't know as you saw any other?

A. I believe the stakes were in, was all.

Q. What?

A. I believe there were some stakes in.

Q. Some stakes?

A. Yes, sir.

Q. Did you cross over the river the last time you was on the north side of the river then?

A. Yes, sir.

Q. And did you cross over to the south side of the river at all?

A. No, sir.

Q. Did you go down—how near did your line run to the rock on the south side?

A. I believe it went, my recollection was it went just under it, or just over the north or west abutment, just over it I believe.

Q. You was on the north side of the river?

A. Yes, sir.

Q. And you was just still, north or west of the abutment, of the stone?

A. Well, right over—must be ten feet.

Q. Well, your survey cut the abutment above?

A. Yes, sir.

Q. And went over it in that way?

A. Yes, sir.

Q. Now, did you take any particular notice of what there was there except what you just saw casually as you went along?

A. Yes, sir.

Q. Had you any instructions in relation to observing any such thing in the canyon?

A. No, sir.

Q. Did you have any instructions from them to observe or take note of or indicate in any way upon your notes or upon your
536 reports of what you found there in the way of any appropriation or of a possession of anybody else?

A. I had no direct instructions, no, sir.

Q. Well no direct instructions; you had no instructions upon the subject, did you?

A. No, sir.

Q. Now, what were your instructions?

Q. Well, our instructions was—well, in fact we had no instructions when we started only to commence and run a line up Provo canyon. We didn't know whether we were going into the reservation or to Park City.

Q. Well, that was the instructions?

A. Yes, sir.

Q. Simply to run that line?

A. Yes, sir.

Q. And now you worked from the beginning on the ground, from the 24th?

A. Yes, sir.

Q. If I understand you, running an angle line until you reached

this point where you saw Searles, and there you had this talk with him?

A. Yes, sir.

Q. On or about the 10th or 11th?

A. Yes, sir.

Q. And then did you go on up from there, on up the stream?

A. Yes, sir.

Q. Right directly?

A. Yes, sir.

Q. At that time and when you got to Ferguson's place, if I understand you, you went back?

A. Well, we got about half a mile above Ferguson's place.

Q. Well, a half a mile;——

A. Yes, sir.

Q. And then you turned around and went back and commenced to run this work over again?

A. Yes, sir.

Q. By the way; did you send in your notes at any time while you were running this line?

A. Which line?

537 Q. Well either of them?

A. We did on the located line.

Q. On the located line?

A. Yes, sir.

Q. What instructions did you receive on that subject?

A. We received instructions to be prompt in sending the notes in so that when twenty miles was completed that the map would be ready to file.

Q. Yes, and did you at various times copy and send in your notes?

A. Yes, sir.

Q. I have noticed in this book here, in some places there I see, a statement, I don't run on them just now, of notes kept, or "notes sent to office to this date:" that would be the time; would it, about the condition of the work about the time you would send them in?

A. Yes, sir.

Q. For instance, that appears on this page which is devoted to topography?

A. Yes, sir.

Cross-examination.

By Mr. WEDGWOOD:

Q. Now, Mr. Collier, I will just call your attention to that book (No. 1) what line was it that you crossed there?

A. Well, I am not sure whether that is the canal line or about where they divert the water, but the two points are very close.

Q. What, what do you mean by that, and what does that mean, does it mean you crossed the railroad survey, crossed the line of their survey?

A. Yes, sir.

Q. Now, what was there that it crossed in the line of work?

A. Well, there was a line of stakes.
Q. A line of stakes?
A. Yes, sir.
Q. Was there anything else done there on the surface of the ground except the planting of the stakes?
538 A. Well, I believe the right of way was cleared.
Q. The right of way was cleared?
A. Yes, something like that.
Q. That is, it was cleared of brush?
A. Yes, sir.
Q. Now, where is that to the best of your knowledge, to the best of your judgment, with reference to some natural object?

Mr. HENDERSON: Well, Mr. Wedgwood, I don't believe he would know by these stations, because they are different, but you can locate it by the other map absolutely.

Mr. WEDGWOOD: Now, how was that line with reference to the level of that line that you was running, that you crossed?
A. In elevation, you mean?
Q. Yes.
A. Well, I think their stakes were above ours.
Q. How much?
A. Oh, I should say something like seven or eight feet.
Q. And how much was you above the river?
A. Well, about 8 feet.
Q. You was about 8 feet?
A. Yes, sir.
Q. And they was something like about 16 feet above the river?
A. Yes, sir.
Q. Now, where was it that you saw 'em working on the flume, was it there pretty close to that point?
A. Yes, sir.
Q. Above or below?
A. I rather think it was just a little bit below.
Q. About how much?
A. Oh, possibly 200 feet.
Q. They were at that time engaged in the construction of a flume or the bed for a flume, which?
A. They were excavating for the flume.
Q. Excavating for the bed of the flume?
A. Yes, sir.
Q. Now, you say that you were up as far as Ferguson's place about the 10th; do you know whether anybody else worked on that line excepting yourselves, that is excepting your crew between Provo and there?
A. No, sir.
Q. Do you know they didn't?
539 A. That is surveying a railroad line you mean?
Q. Yes.
A. Or any line?
Q. Down between Provo and your crew on that line?
A. I didn't quite understand you.

Q. Well, you say that an angle line was run from Provo up to Ferguson's place?

A. Yes, sir.

Q. Whereabouts did you start to come back from, where was you when you started to come back?

A. About a half a mile above Ferguson's.

Q. About a half a mile above Ferguson's?

A. Yes, sir.

Q. Now, did you come clear back to Provo?

A. Well, I am not really positive whether we came back to Provo just at that date, right now.

Q. Yes, now isn't it a fact that somebody else ran in the curves from Provo, or isn't it a fact that you didn't come down only to the bench that is just outside of Provo canyon, running curves?

A. I know we came back to Provo after that, but whether we——

Mr. HENDERSON: Just a moment; read that question, I didn't understand it. (Question read by reporter.) Well, I haven't any objection to the last part of the question.

Mr. WEDGWOOD: Yes, the first was stricken out.

Q. Now, refreshing your memory, isn't it a fact that you only came to the mouth of the canyon, or a little below, and started in there putting in the curves?

A. Well, I rather think we did come just to the bench now.

Q. Just to the bench; then as a fact you went up to about the Ferguson place and then came back to the mouth of the canyon and ran in the curves from there; that is your judgment of it now?

A. Repeat that, please.

Q. I say, your best recollection now is that after you had got above Ferguson's place you came down to the mouth of the
540 canyon and commenced there?

A. No, I don't think so.

Q. What is it?

A. I think we came back to the bench.

Q. Well, when I speak of the mouth of the canyon, I mean the bench that is shortly——

A. (Int.) Oh, no.

Q. Well, what do you mean by the bench?

A. What I mean by the bench is a point this side along about the Carter place.

Q. About the Carter place?

A. Yes, sir; Carterville, I believe they call it.

Q. That is how far from the mouth of the canyon—how far from Provo?

A. Oh, I guess six miles, from the mouth of the canyon.

Q. Six miles from the mouth of the canyon?

A. Let's see, it is about—well, it may not be that far—no, it isn't that far.

Q. No, something like two or three miles?

A. Two or three miles, yes, sir.

Q. And you commenced there and ran in the curves?

A. Well, we had our curves up to that point then.

Q. How is that?
A. We must have had our curves up to that point.
Q. You must have had your curves up to that point?
A. Yes, sir.
Q. Now, when did you go back up to Ferguson's again?
A. I think about the 18th of May.
Q. About the 18th of May?
A. Yes, sir.
Q. And now you speak about seeing some flags upon the side hill; you didn't see those until you went back the second time?
A. No, sir.
Q. And you didn't see those until you went upon the hill itself?
A. No, sir.

Q. They were not sufficiently marked to attract your attention when you was running the line, if they were there, the first line?

A. Oh, no; they were to- far off to *ne* noticed.
Q. To- far off to be noticed?
A. Yes, sir.
Q. Now, when you got up to Ferguson's place and above, you say it may have been the 18th of May?
A. It was about then.
Q. About the 18th?
A. Yes, sir.
Q. Did you see any stakes up on the side of the hill the 18th of May up there?
A. I don't believe I did, that is at Ferguson's.
Q. Don't believe you did?
A. No, sir.
Q. When is it that you first began to see those stakes upon the hill?
A. When we got to South fork.
Q. To South fork?
A. The latter part of May.
Q. Mr. Ferguson's and South fork are pretty near together, ain't they?
A. It was around up above Ferguson's.
Q. You mean the fork on the north side of the river: you don't mean the fork on the south side of the river?
A. Yes, sir.
Q. Mr. Ferguson's and South fork are very near together?
A. Yes, sir; they are.
Q. Now, as I understand you, the first time, or the last time that you was up there, you noticed a gap in the stakes or flags from a point near Thayer's until you got up near Thayer's place.

Mr. HENDERSON: I object to that; he hasn't said that, if the court please. He said that there was a place that he didn't see; that he wasn't where he could see them.

The COURT: My recollection is that there was something about a gap. Answer the question.

Mr. WEDGWOOD:

Q. I understood him to say so; is that a fact, did you say so?

A. Yes, sir.

Q. Then there was a gap, so far as your observation went,
542 not anything upon the hill, from a point above Thayer's place, to up above Ferguson's?

A. Yes, sir.

Q. Now, where is Thayer's place with reference to Hanging rock and Middle rock; about how far below, approximately?

A. Well, I think it is about, well, I could tell you exactly from my notes.

Q. Oh, I don't care about that, but I just wanted a general——

A. (Int.) I should think about three miles.

Q. About three miles?

A. Something like that.

Q. And how far is the place where you first noticed the stakes, above Ferguson's place?

A. How far above Ferguson's place that I noticed them first?

Q. Yes.

A. About a half a mile.

Q. Then so far as your observation went there was a gap as any marks on the hill of something like three miles at least?

A. Yes, sir.

Q. Now, Mr. Searle told you along about the 10th of April that they proposed to build a sixty-foot dam; did he tell you where?

A. He said at that point.

Q. Now, what point was that?

A. That was the point where their flume went into the bed of the river.

Q. Where their flume went into the bed of the river?

A. Yes, sir.

Q. Now, is there any way that you could locate that with exactness; could you state the station number?

A. I think it is about a thousand feet this side of Hanging rock.

Q. About a thousand feet this side of Hanging rock.

A. Yes, sir.

Q. Is that where you have marked the dam in your notes, "Proposed dam"?

A. That is the Hanging rock, I think where the proposed dam is. I think it is about station——

543 Q. (Int.) That is what I am showing you there.

A. I think it is the Hanging rock.

Q. You think it is the Hanging rock?

A. Yes, sir.

Q. Is there any way that you can determine?

A. Well, I am not sure.

Mr. HENDERSON: Well, that was given the other day by your man, by the number of the station.

A. I am quite sure that is the Hanging rock in topography.

Mr. WEDGWOOD:

Q. Well, is that where Searle told you?
A. No, sir.
Q. Anybody else tell you anything about that?
A. No, sir.
Q. When was that made, that note?
A. That is where we crossed the line.
Q. No, that proposed dam?
A. I think that was about the 18th of May.
Q. That was about the 18th of May?
A. Yes, sir.
Q. That was when you went up there the second time?
A. Yes, sir.
Q. Then that is your notes of the second time?
A. Yes, sir.
Q. Now, how did you happen to make that note there the second time?
A. Well, I could not say, except from the line of staked and the cutting that they had done.
Q. What cutting had they done?
A. They had cut this line across the canyon, cut the brush.
Q. A line of brush?
A. Yes, sir.
Q. Well, was there anything in the cutting of that line of brush to indicate a dam?
A. Well, the stakes were there, and I don't know but what I was told by some one. I got the impression though.
Q. Well, that is what I want to know, Mr. Collier, whether or not there was anythtng there which showed you that there was a
544 dam to be built there or whether you got the information from some party?
A. Well, I couldn't say just how I got the information, but I have got the note.
Q. Well, I ask you if there was anything there that would convince an engineer or show an engineer or an ordinary person that there was a dam to be built there?
A. Well, it showed it to me.
Q. Showed it to you?
A. Yes, sir.
Q. By anything more than the cutting of brush?
A. Well, I couldn't say what else.
Q. Have you any recollection of anything else?
A. No, I have no recollection of anything else.
Q. Was there anything to show the height of the dam?
A. No, sir; not at that point.
Q. Nothing there at that point?
A. No, sir.
Q. Now, you have been told before that the dam was to be lower down?

A. Well, yes.
Q. Something like a thousand feet?
A. About a thousand feet, yes, sir.
Q. Or more, and have you any recollection at all of being told about this?
A. I think possibly between one and three weeks after, Mr. Searle told me that they intended to build the sixty-foot dam at the point a thousand feet below Hanging rock, he afterwards told me I think it was about this point, he says, "I intended to tell you some time ago when I said to you that we intended *to* build that, I intended to tell you that we intended to build an 85-foot dam."
Q. At Hanging rock?
A. I think that was about the point; one or the other.
Q. So, between those, between the time you was up there first; there had apparently been a change?
A. Yes, sir; it looked like it.
545 Q. That is, you was told one thing by Mr. Searle the first time you was up, and another thing by him the second time you was up?
A. Well, I wouldn't say that Mr. Searle told me at Hanging rock they intended to build a dam there.
Q. You won't say?
—. But I will say that he did say that he intended to tell me that they intended to build an 85-foot dam instead of a sixty.
Q. Did you see him at work there anywhere?
A. No, sir.
Q. You didn't see him at work at all?
A. Well, above there I did.
Q. You saw him at work above there?
A. Oh, yes.
Q. That was along in May, after the 18th or 19th.
A. It must have been.
Q. And at that time he was at work on the 80 or 85 foot level?
A. Well, now, I couldn't say whether he was on the 85, or was completing the sixty.
Q. Well, did you know whether the sixty was ever completed or not?
A. No, I did not.
Q. You don't know?
A. No, sir.
Q. Well, then, if the sixty was never completed, you know the eighty was run around the circle here?
A. Yes, sir.
Q. Saw it?
A. Yes, sir.
Q. If the sixty was never completed, and had been abandoned before that time, he must have been at work on the eighty?
A. Well, when I saw him at work he must have been on the 85.
Q. That is, on the 85-foot level?
A. Yes, sir.
Q. That's all. I will just ask you this question; was there any

time that Mr. Baxter or another crew was at work on the line while you was working there?

A. Well, Mr. Baxter, I was with Mr. Baxter.

546 Q. Then there was two crews working there part of the time you was working there?

A. Oh, no.

Q. There wasn't?

A. Not of the railroad.

Q. Not of the railroad?

A. No, sir.

Q. Where was Mr. Baxter working when you was working there, do you know?

A. He was with me when we commenced I believe on the 25th, I think; on the 25th of March, and then he was with us two or three days I think, and he was with us again after I got up two or three days; we must have got up to the mouth of the canyon; we were working above there and he left us for a few days, and when we got up to Ferguson's he came up; he came up on the 13th and then we moved down.

Q. The 13th of what month?

A. That was April.

Q. And then you moved down?

A. Yes, sir.

Q. Now, I will ask you one other question?

A. I say the 13th—must have been the 14th.

Q. Now, did you find brush cut down to the river bank anywhere between Hanging rock and the bridge?

A. Hanging rock and the bridge?

Q. Yes.

A. There was some brush cut.

Q. How?

A. Yes, sir.

Q. At about Middle rock?

—. ——.

Q. Now, on which lin do you mean?

A. The first one.

Q. Well, I don't care any line of work that was done there by other people excepting you.

A. Yes; there was brush cut all along there.

Q. Brush cut all along the river at various places?

A. Well, I couldn't say how close to the river; it was on the canal line or flume line.

Q. On the canal line; did you go to where it reached the river?

A. Yes, sir.

Q. Well, did you see the brush cut down to the river?

A. Yes, sir.

547 Q. Well, then it was cut down to the river?

A. About that point, yes, sir.

Q. On the canal line?

A. Yes, sir.

Q. And where did that touch the river?

A. About a thousand feet this side of Hanging rock.
Q. A thousand feet; was that at Middle rock?
A. Well, I don't know the name of it.
Q. Did you go down to the river where you speak about that Searle told you they was going to build the sixty-foot dam?
A. Well, that was where the flume went into the river.
Q. What is it?
A. That was where the flume went into the river.
Q. That was where the flume went into the river?
A. Yes, that was the point.

Redirect examination.

By Mr. HENDERSON:

Q. Now, Mr. Collier, the cutting of the brush that you saw at the place where you understood that the flume came to the river, was that cutting evident, was it evident from its looks that it was following the line of flume?
A. Oh, yes.
Q. Well, so that the indications showed what it was, that it was clearing off for a line of flume along the stream?
A. Yes, sir.
Q. Now, you said in answer to him, he put the question, and you made an affirmative answer, that there had evidently been a change between the times that you was up there; what do you mean by that; what change do you know of other than in the statement that Searles made to you?
A. Well, all I know the change was in difference of location of the dam, at Hanging rock, and the one below; that was my impression.
Q. Yes, the only difference that you know of is the differ-
548 ence in the two statements that Mr. Searles made?
A. Well, Mr. Searles may have been consistent in the statement that he made, but where I got my information or about the dam at Hanging rock, I don't know where I got it, that there was to be the dam——
Q. Well, I mean the difference between the two statements, between the 85 feet and the 60 feet, do you know of any change except such as was indicated by what Mr. Searles stated to you?
A. No, sir; that is all.
Q. Now, let me understand; the first time that you went up, running your angle line, did you have any occasion at that time to go up the sides and search for the section corners.
A. When I went up the second time?
Q. No, the first time.

Mr. WEDGWOOD: He answered that to you. Object to it as having been gone over.
Mr. HENDERSON: I say there was a question asked that confused that, and I want to find out the difference between the first and the second time.
Question read.

The COURT: Answer the question.
A. No, sir.

Mr. HENDERSON:

Q. Now, was it the first time that you testified anything about seeing the line of flags or stakes up on the sixty-foot level?
Q. Now, what was that again, Judge?
Q. Was it the first time that you was running up there when you was only running the angle line, was that the time when you stated you saw some flags or stakes up on the sixty-foot level?
A. It must have been the second time.
Q. Well, it was the second time?
A. Yes, sir.
Q. You said something in reply to him that indicated that I might be mistaken about that; that was my recollection.
A. Yes.
549 Q. It was the second time that you went up?
A. Yes.
Q. Now, you have said something about there being a gap in the row of stakes; what do you mean by that?

Mr. WEDGWOOD: We object to that as having been gone into. He went into it on direct examination.
Argued to the court.
The COURT: Answer the question.
Mr. WEDGWOOD: Take and exception.

Mr. HENDERSON:

Q. Just explain fully what there is about that?
A. What I meant by a gap was at a point about a mile below the Thayer place is the north line of the surveyed land. I had occasion to go up on the hill there, and something like a half a mile above the Ferguson place, there are stakes in, reservoir stakes; I saw those.
Q. Yes, now, I want to ask you the direct question if stakes might have been there without your observing them?
A. Yes, sir; they could have been.
Q. Now, you stated also in reply to Mr. Wedgwood that you first saw stakes upon the sixty-foot level at South fork?

Mr. WEDGWOOD: The eighty-foot.
Mr. HENDERSON: The eighty-foot level was it?
The COURT: 85.

Mr. HENDERSON:

Q. 85; was that true that you first saw the 85-foot stakes at South fork?
A. My recollection is that I stated that I saw both there the sixty and the eighty-five.
Q. Well, at any point but South fork?
A. That was above Ferguson's place, the South fork.
Q. Just above Ferguson's, there you saw both of them?
A. Yes, sir.

Q. I want to ask you this question that I forgot on the
550 direct; doesn't refer to anything he asked you about. Did you in making any of your survey up there come onto a line that had been run by somebody else, and did you follow that or make use of stakes that had been set there for the purpose of tying to them or anything of that kind?

A. Yes; I think I made use of one or two of lines.

Q. Yes; just explain now what they were?

A. Well, I couldn't tell just the station.

Q. Well, I don't care so much about that, but what lines were they; how high up on the mountain, or how low down, or what were they?

A. Well, they must have been twenty or 25 feet above the water. Some, oh I guess three or four miles above, two or three miles above the Ferguson place, along about where the, this side of where the cabin is; there is a cabin up there right near the road; about that point.

Q. Let me ask you this, if either of those that you used was the contour line of the reservoir?

A. Yes, sir.

Q. What?

A. Yes, sir.

Q. Yes, and which line, the upper or the lower?

A. Well, I think it was the upper.

Q. The upper or 85-foot?

A. Yes, sir.

Q. How were the stakes marked?

A. They were gig stakes, they were two by fours, I believe.

Q. Yes, and what time was that?

A. That must have been about the latter part of May or first of June; latter part of May I think.

Q. No, about what point was that; just explain what point that was?

A. Well, it was at a point something like a mile where the reservoir line makes a turn, where it crosses the river and turns on the east side, or south side.

Q. That is, something like a mile from the upper end?

551 A. The upper end of the reservoir, down.

Recross-examination.

By Mr. WEDGWOOD:

Q. What do you mean by tying to?

A. Sir?

Q. What do you mean by tying to these stakes? Judge Henderson asked you if there was any point that you tied to, any other line of stakes?

A. Well, what I mean by tying to a line, was making a connection, giving the angle, course and the distance as I go on.

Q. Simply noted that the same as you would any other object that you crossed?

A. Yes, sir; but I made no tie to this line.

Q. You what?

A. I don't construe that a tie; I only used their cutting.

Q. Did what?

A. I only used their cutting, that is the——

Q. Well, open space in the brush?

A. The open place for the stake line.

Q. Yes.

A. One course there is all; that is all.

Q. Now, you was up on the hill between Thayer's place and a half a mile above Ferguson's, was you?

A. Oh, yes.

Q. And you had opportunity to see stakes?

A. Yes, sir.

Q. If they were there?

A. Well, the reason I could see them above Ferguson's, was, the ground was all open. There was no brush there.

Q. So you had opportunity to see them before that time, in this place where there was no stakes?

A. Sir?

Q. You had opportunity to see them before that time in this place where there was no stakes, where you didn't see them?

A. No, I don't think I had an opportunity except at one
552 point a mile below Thayer's, I had an opportunity to see them.

Q. You mean you had no opportunity to see them up on the hillside there?

A. Well, I didn't see them. I didn't have any occasion to go up on the hill.

Q. But they didn't attract your attention at all?

A. No, sir.

Q. Now, did you notice the brush cut at Hanging rock between the time, the first time you was up there——

A. Did I notice brush?

Q. Cut between, at Hanging rock, across the space between Hanging rock, the first time, did you notice that brush cut the first time?

A. Well, I don't know where I first noticed it.

Q. Don't know?

A. No.

Q. You don't know whether or not it was cut the first time you was up there?

A. No, I don't know positively it was cut.

Q. As far as you could say it may have been cut between the two times you was up there?

A. Yes, it may have been cut between the two times.

Q. Was you told the sixty-foot dam was to be built at Middle rock?

A. Yes, sir.

Q. Then you was afterwards told that there was to be an 85-foot dam?

A. Yes, sir.
Q. And at that time you noticed the brush cut?
A. Yes, sir.
Q. And that is all the knowledge you had?
A. Yes, sir.

Mr. HENDERSON, redirect examination:

Q. Mr. Collier, I want to ask you, at what time you put this statement on here, "proposed dam"?

Mr. WEDGWOOD: He testified the second time he was up there.

A. Yes, that was the second time; about the 18th of May.

Mr. HENDERSON:

Q. Yes, when you was running the curve lines.
A. Yes, sir.
Q. And at that time at least you put that on there, you
553 noticed this condition?
A. Yes, sir.

Mr. WEDGWOOD:

Q. I want to ask another question Judge. What date was it when you passed Thayer's?
A. About the 18th of May.
Q. About the 18th of May?
A. Between the 16th and the 18th I would think; 16th or 18th.
Q. Well, the first time I mean?
A. Oh, the first time; it was about the 9th or 10th of April.
Q. 9th or 10th of April?
A. Yes, sir.
Q. What was the date that you was in the canyon, do you remember?
A. The first date we got in the canyon?
Q. Yes.
A. I don't know the exact date; must have been along about, pretty close to the first of April, I would think.
Q. You think you got in the canyon about the first of April?
A. Yes, sir.
Q. You were using your instruments up and down all through the canyon?
A. Oh, yes.
Q. Your level there?
A. Yes, sir.
Q. Was you in view from the public road?
A. Not all the time, no, sir.
Q. Well, part of the time were you in view?
A. Oh, yes, sir.
Q. Anybody could see you as you were working there, going up and down the road?
A. Yes, at different points they could see me.

Mr. HENDERSON:

Q. Now, another subject: You stated I think that you knew of no other force of men at work on your line while you was there, is that true?

A. I meant that there was no other Rio Grande surveyors on that line.

Q. Well, was there any other force of men at work on the Rio Grande line through the canyon while you was there, so far as you know?

554 A. No, sir.

Q. No; now, Mr. Collier, the man that was immediately over you, what is his name?

A. Mr. Baxter.

Q. Mr. Baxter, where was he employed these days as a rule?

A. When he was there?

Q. No, when he was away from there, that he wasn't there?

A. Oh, he was at Marysvale.

Q. He was at Marysvale on the Sanpete work down there?

A. Yes, sir.

Q. And as I remember, he came up and stopped a day or two with you as the work was going on?

A. Yes, sir.

Q. And that was all; now when you ran this line, on which side of the river was it?

A. It was on the north side.

Q. All the way?

A. Yes, sir.

Q. Yes, it was all on the north side?

A. Yes, sir.

Q. Was there any change during the time that you was there with the company, was there any change made of the line over to the southeast side?

A. No, sir.

Q. That was all after you left if it was done at all?

A. Yes, sir.

P. N. NUNN recalled for further cross-examination.

Examined by Mr. WEDGWOOD:

Q. Mr. Nunn, have you got that paper showing the 25-foot estimate of equalization of water?

A. Well, it wasn't in the form of a paper, simply an estimate based upon figures which Mr. Searle took from his note book, he has the note book and can give the same figures; the results I took from his as to length, breadth and height*h*, and the calculation. I took his figures.

555 Q. Then so far as the 25-foot head of water, raising that in the canyon, there has not been any plan made out to show upon paper, in the canyon and the elevations, no locations made in regard to that, has there?

A. Not with great exactness.

Q. Well, with, how—approximately how exact?

A. I should say they are exact with ten per cent., ten or fifteen.

Q. Now, Mr. Nunn the same thing has been done—that you could set down there in notes and make the simple calculation, that is all that has been done about it, isn't it?

A. Yes.

Q. There hasn't been any plan made, might say, such as an engineer would approve and the company would adopt; no definite stable dates laid down on paper?

Mr. HENDERSON: Plan of what, Mr. Wedgwood?

Mr. WEDGWOOD: Raising the water 25 feet.

Mr. HENDERSON: Well, that is all the plan there is about it.

Mr. WEDGWOOD: I am asking what you people have done here: it may be of no importance to you, but it may be of some to us.

Mr. HENDERSON: You ask him to figure that area?

Mr. WEDGWOOD: No, I ask him to produce this paper on which he said this matter had been reduced to a plan.

Mr. HENDERSON: I object to that if the court please; he hasn't said it had been reduced to a plan.

Mr. WEDGWOOD: He did and I asked him to get the paper.

Argued to the court.

The COURT: Answer the question. Read the question, Mr. Reporter.

Question read.

The COURT: Answer the question.

A. Well, I hardly know how to answer a question of that kind; a plan for the solid contents of the reservoir?

Mr. WEDGWOOD:

Q. I didn't ask you that. I asked you with reference to
556 the height*h* of 25 feet, where that was from; you testified that 25 feet of water, water raised to the height*h* of 25 feet by a dam in the canyon there would be of great benefit to you, your company, so far as temperature, much ice, is concerned, and equalizing the pressure, and I ask you from what point that 25 feet started; this morning I asked you if you could tell me and you said no you couldn't do it, but it has been mapped out or drawn up and put upon paper somewhere, and you thought you could get it; and now I ask you have you got that paper?

Mr. HENDERSON: Now, if the court please, I challenge that statement and if it is denied I want the notes referred to.

Mr. WEDGWOOD: All right.

Mr. HENDERSON: He said this, and if it is denied, I want the notes brought out. He said that that could be ascertained; that Mr. Searles had the minutes of survey, that he had made the computation; that he had made that and could get it, and Mr. Wedgwood asked him to get it.

Mr. WEDGWOOD: Well, I know he didn't say anything of the kind.

The COURT: Turn back to the notes, Mr. Reporter.

Mr. WEDGWOOD: Well, I won't take the time now, but he can look it up this evening, and if I am not correct that can go out.

Q. Now, Mr. Nunn, at a point opposite South fork, how wide would the surface of the water be, raised to the height of 85 feet in the canyon?

A. The plan shows it to be from two to 3,000 feet, I think.

Q. Well, that is quite a margin; don't your plans show any nearer than that?

A. If you will look at the plans——

Q. I am asking you, and you can take any data that you can get; you are the engineer, I understand, and understand the country?

A. No, it cannot be stated any more nearly than that in the way in which the ground lays.

557 Q. Well, take it at a point then from the north bank of the South fork or where the angle—now, as I understand, South fork—making this the south, for the time being, comes into the river something like that, with an island in here; now, when the water is raised, the reservoir would be say something like that; call that South fork, what would the distance be there, am I correct?

A. That drawing?

Q. Yes, correct it any way so as to get at it.

A. Instead of it being in that shape it is something more like this, and this across here is about 3,000 feet, and here about two.

Q. Now, just mark out the North and South, will you; that is——

Mr. HENDERSON: Is that the contour of the basin?

Mr. WEDGWOOD: Just mark the contour of the reservoir at the mouth of the South fork on there, approximately.

Mr. HENDERSON: Well, Mr. Wedgwood, that map that you asked for showing the whole thing is here.

Mr. WEDGWOOD: Just let him have it if he wants it.

A. Now, that is about approximately as I could make it: the reservoir would have to be measured across there, and across here; from two to 3,000 feet, two in one place and three in the other, approximately.

Mr. WEDGWOOD:

Q. Now, I ask you if you can come any nearer than a thousand feet in the distance across there?

A. Well, I didn't note that when I looked at the map.

Q. There is the map right there and the scale.

A. It would be some less than 2,000 feet.

Q. About how much less?

A. I should say about 1,800 feet, between 17 and 1,800 feet.

Q. It is about 1,800 feet; now as it lies now, Mr. Nunn, there is a wagon road runs up South fork, is there not, here?

A. I believe there is; two of them.

558 Q. Two of them; now if that was flowed to the depth of an 85 foot dam what would become of that wagon road?

Mr. HENDERSON: I object to that, if the court please, that is some-

thing that has not been asked about, a subject in which we have no concern in this cause whatever in any way. We haven't asked about it; it isn't cross-examination in the first place.

The COURT: I don't think it is cross-examination.

Mr. WEDGWOOD: Well, I would like to argue that question about a minute. I insist it is cross-examination in every sense of the word. They testify here that they have examined the situation and that they have found it both practicable and feasible. Now if that is an issue in this case and they have brought into it every element which makes it practicable and feasible, it is a proper subject of cross-examination.

Argued to the court by respective counsel.

The COURT: The question before the court is as to the correctness of the question as cross-examination. The word feasible was used by this witness in his direct examination. While the court doesn't desire to pass now upon the right of the plaintiff to show the reasonableness of this, under the statute I scarcely think it would be proper cross-examination under the word feasible, I think the objection should be sustained.

Mr. WEDGWOOD: We take an exception.

The COURT: At the present time of course the court doesn't pretend to pass upon the right of the plaintiff to engage in the business at the proper time and the proper manner.

Mr. HARKNESS: I think that will come more properly from our side when we get ready.

539 Redirect examination.

By Mr. HENDERSON:

Q. Now, Mr. Nunn, you are acquainted in a general way with that canyon up there?

A. Yes, I believe so.

Q. I don't suppose you made this map?

A. No.

Q. And I don't suppose you took the notes from which it was made?

A. I did not.

Q. But you have seen the map?

A. Yes, sir.

Q. Does it so far as you can see and from what you know, does that seem to approximately represent the situation up there?

A. I think it does.

Mr. HENDERSON: Now, that is the only evidence that I can give you now as to that map; you called for it, and if you want to put it in evidence upon that statement or allow us to put it in.

Mr. WEDGWOOD: It is the same one you used in the other case.

Mr. HENDERSON: Well, I suppose it is the same one. What I wanted to say is that you may, if you want, examine this witness upon it in detail.

Mr. WEDGWOOD: No, I don't want to.

Mr. HARKNESS: Now, Judge, we better put that map in, it will save time.

Mr. HENDERSON: I think so; we shall authenticate it further on. We will offer it evidence. Of course it will save time.

Map marked by reporter "Def'ts' Ex. 7, D. H. R. Ferguson case."

OTTO B. SURH. Called and sworn for defendants.

Examined by Mr. HENDERSON:

Q. What is the given name?

A. Otto.

Q. Where do you live?

A. Denver.

Q. Did you—was you formerly employed here in Provo
560 canyon by Mr. Nunn?

A. Yes, sir.

Q. What is your business?

A. Mining and hydra-lic engineering.

Q. How long have you been engaged in that business?

A. About three or four years.

Q. When did you first come to Provo in connection with this business?

A. On October 7th, 1895.

Q. 1895?

A. Yes, sir.

Q. Where did you come from at that place?

A. From Telluride, Colorado.

Q. And at this time that you visited here, did you go into the canyon?

A. Yes, sir.

Q. How long did you remain there at that time?

A. I remained in the canyon until about Christmas of that year.

Q. Well, how long did you remain here in Provo, in this vicinity?

A. Before I went into the canyon?

Q. No, in all from the time you came to Provo until the time you left Provo, how much?

A. Until the 12th of January of '96.

Q. The 12th of January, yes; and during that time what portion of the time did you spend in the canyon?

A. Spent all the time in the canyon except from Christmas until I left.

Q. When you went to the canyon, or came here to Provo who did you find if anybody in connection with the enterprise?

A. I found Mr. Cramer.

Q. Who is Mr. Cramer?

A. Mr. Cramer is the hydraulic engineer of the company.

Q. And did Mr. Cramer—was anybody else employed, any workmen, or anything of that kind employed at that time?

A. I think there were about two men employed at that time, Mr. Cramer employed.

Q. This was what year?

A. 1895.

561 Mr. WEDGWOOD:

Q. Mr. Cramer and yourself, did you say?
A. Yes.
Q. Mr. Cramer and yourself, or besides you?
A. At first when I came here I found Mr. Cramer had engaged two men for the first——

Mr. HENDERSON:

Q. Now, did you say that was '95?
A. Yes, sir.
Q. And was any work going on up the canyon?
A. I don't think there had been any just then when I arrived there.
Q. Well, did you see any work that had been done?
A. Yes, sir.
Q. I ask you what—were there indications that there had been work going on there?
A. Yes, sir.
Q. That was the 7th day of which month did you say?
A. October.
Q. Of October, yes; now did you commence work there yourself?
A. Yes, sir.
Q. What did you do?

Mr. WEDGWOOD: Well, I think we will move to strike out his answer of indications of work going on.
Mr. HENDERSON: Indications that work had been done; I want to show by him particular things that he did there.
Mr. WEDGWOOD: Well, go ahead.

Mr. HENDERSON:

Q. What did you go to work at?
A. We commenced work on trial lines for the canyon.
Q. Well, I don't care anything about that, about the trial lines; I will withdraw that, because I don't want to encumber it with it or take the time.
Mr. HARKNESS: Well, I think we will prefer to have it stand.
Mr. HENDERSON: All right; it may stand, and if you want to make that the basis of a two or three hours' cross-examination on that, it may stand.
562 Mr. HARKNESS: Never mind Judge, we haven't lectured you any.

Mr. HENDERSON:

Q. Now, did you do any work afterwards on *the* what was known as the Suhr tunnel—the Suhr level or sixty-foot level?
A. Yes, sir.
Q. When did you commence on that?
A. I commenced on that about October the 10th, I think.
Q. 8th or 10th, did you see Mr. Nunn there during that time?
A. What Mr. Nunn.

Q. Either of them?
A. I saw Mr. Nunn there about a week after I arrived.
Q. Which one?
A. Mr. P. N. Nunn, and several times after that.
Q. And several times after that?
A. Also Mr. L. L. Nunn, I saw him.
Q. Did either of those gentlemen explain to you in any way at that time what part this sixty-foot level that you commenced work on played in the scheme that they were carrying out there?

Mr. HARKNESS: That we object to.
Mr. HENDERSON: Well, this is preliminary.
The COURT: I suppose the objection goes to the idea of what was said, or what was——
Mr. HARKNESS: Well it is simply hearsay.
Mr. HENDERSON: Well, this is preliminary; I am finding out whether there was anything said.

The COURT: Answer the question.
A. Yes, sir; in a general way.

Mr. HENDERSON:

Q. Now, I ask you what it was. I say, if the court please, I offer it upon this theory, and I say it was received in the other case that was tried, the same kind of testimony:
Mr. WEDGWOOD: No, he didn't testify.
Mr. HENDERSON: No, I know that he didn't, but the same kind of testimony, the same class of testimony, and this is a part of
563 the *res jesta*; it is a part of the transaction, and if he was told why that was to be done, the scheme was explained; it was before any question was raised in relation to it, it was while they were there alone, while they were devising a plan, and before any question was raised whatever to it. It is right for us to give the avowed intention and the avowed determination and avowed scheme that we had in mind and were then carrying out as a part of the case itself. That is the theory upon which I offer it.
Mr. HARKNESS: The parties who made the scheme and who they say explained this to the witness have testified what their schemes were, and what they directed, and what they did. Now, this *this* is attempting to prove by one witness that another witness on the same side said to him, without it being verified at all in any way, and we say it is pur-ly hearsay and not admissible. It is declarations of agents and employees of these parties in their own interest, or own favor.
The COURT: I think, Judg- Henderson, added to what Nunn and others have testified, as to what their scheme was, then what this man did there is proper.
Mr. HENDERSON: Now, did—I understand I was asking of something else.
The COURT: Well, as to what this man should have done there in confirmation of what Mr. Nunn and others have said was their scheme is proper, I think, but I think, *but* as to what they may

have said to him, his acts of course would indicate, his work would indicate, whether it is in keeping with what they testified was their scheme: that word scheme has been used here—or enterprise, whatever it may have been.

Mr. HENDERSON: I want to take an exception, and I want to make an offer of what I want to prove by this witness. I want to prove by this witness that when he came, that in the first
564 place he was sent here by Mr. Nunn as a young engineer that was in their employ, and that he was told to run that level up there and to permanently stake it and mark it.

The COURT: That has been testified.

Mr. HENDERSON: Yes, I know, it was stated by Mr. Nunn, and it confirms what he says. I offer to prove by this witness that they told him to do that; that he did come up there, and at the same time for the purpose of having him understand the carefulness with which he should do it, that they explained to him that it was for the purpose of connecting it with a dam which was to be built there, that was to be raised—in the first place the water was to be raised up to that level, and that this ditch that was surveyed there, or canal was to tap that dam, and that above that there was to be a head raised above it, and that it was for that purpose; and that he did go on in pursuance of that and make it and stake it. That is the offer I make in relation to it.

Mr. HARKNESS: We don't object to that portion of it.

The COURT: As to what he did?

Mr. HARKNESS: That he was instructed to run the level.

The COURT: The court doesn't understand that being objected to; is was merely what was stated to him.

Mr. HENDERSON: Yes; I understand that is what the court rules out is the statement by them.

The COURT: Conversation.

Mr. HENDERSON: With the parties for which it was done?

The COURT: Yes; they have already testified in regard to that.

Mr. HENDERSON: I then make the offer from this party, that at that time that they explained to him the purpose for which it was done.

Mr. HENDERSON: Mr. P. N. Nunn wants to make a statement, a correction in his statement here as to the figures; just take the stand.

565 P. N. NUNN, recalled.

Mr. HENDERSON:

Q. Mr. Nunn, just state what it is?

A. The statement that I want to correct it that which was illustrated by the diagram.

The COURT: Well, in regard to the mouth of South fork?

A. In regard to the amount of water in the overflow.

Mr. HENDERSON:

Q. That would flow over the dam?

A. I believe it was stated in that way; I stated that the height of the water at this point, which was probably about a level back, (illustrating) would be five feet high. I should have said about one-fourth of that amount; as I just reversed, I doubled the amount which we have calculated what we have on our present dam instead of taking one-half of it.

Q. It was an error in calculation?

A. It was just a momentary calculation and something that I hadn't thought of before.

Cross-examination.

By Mr. WEDGWOOD:

Q. I will just ask one question; did you see the river two years ago last spring?

A. Two years ago?

Q. Or two years ago this spring?

A. No, I wasn't here two years ago this spring.

Q. Do you know as a fact that the river was over its banks all along from the mouth of the canyon down to here?

A. Yes.

Q. You know as a fact that the road running almost directly west was a lake in the whole canyon down there and the whole canyon down there was a lake?

A. Yes.

Q. For a half a mile or so in circumference, across it?

A. Yes, sir.

566 Q. Do you mean to say that there would be no more water than that going over the dam with the water in that condition?

A. Yes, I mean to say that; our calculation is bases upon the very maximum, at the highest point of water in the reservoir would be fifteen inches above the crest of the dam, providing this crest was not more than ten or fifteen feet wide.

Q. Was that based upon the way the water was two years ago this spring?

A. That was based upon the largest estimate that I could get, either from the Government reports or from the engineers locally, here.

Q. Do you remember whether it was based upon the water here two years ago?

A. Not alone two years ago, but the highest water that has been known.

Q. The highest water that has been known?

A. Yes, sir.

Q. Would flow over that a foot and a quarter?

A. Yes, that was——

Mr. HENDERSON (int.): What basis was that on?

A. That was on the basis of a 400-foot weir.

Q. 400 feet?

A. Long.

Q. And a colum- of water there a foot and a quarter wide?

A. No, the water in the reservoir would stand a foot and a quarter higher than this. The colum- wouldn't probably exceed six inches high.

Q. Yes, I know, but at the breaking-off place, the commencing place up there, it would be a foot and a quarter?

A. Yes.

Q. Of course it would draw down as it went faster through that?

A. Yes.

Q. If it was absolutely a point a sharp edge of it that went over, it would probably be a foot and a quarter would it?

A. No it wouldn't stand that high in recedence.

Mr. WEDGWOOD: He has got it down to six inches.

A. Yes.

Mr. HENDERSON:

Q. Six inches of where it run*d* over the front part?

The COURT: Or where it runs over the crest of the dam?

567 Mr. HENDERSON:

Q. Yes, where it runs over the crest of the dam?

A. Yes, sir.

Mr. WEDGWOOD:

Q. You mean to say the water r*i*nning over this dam would be a six-inch stream of water at the extreme high water of the river?

A. Not to exceed six inches here (illustrating), and less as it goes down?

Q. Less as *to* goes down?

A. Yes, sir.

Q. Now, what would be the striking force of that water, where it struck the river?

A. It would depend entirely upon the surface over which it flowed.

Q. Well, upon such a dam as you have?

A. My remembrance is practically nothing more than it would be from jumping over steps.

Q. Well, the kind of a dam you have drawn here, the details of that dam you speak of?

A. I have illustrated once before, it would be more that shape, and would be—no one would think of making that a plain surface dam, for the reason which you suggest.

Q. And it would be practically nothing?

A. No.

Q. Well the, the idea of building a solid dam, smooth face on each side, that has been rejected, has it?

A. I don't know that it was ever entertained.

Q. Don't know that it was ever entertained?

A. No.

Q. You was here and testified on the last suit?

A. Yes, sir.

Q. Testified particularly in relation to this dam?
A. Yes.
Q. Did you ever mention at that time in your testimony any question of building a dam in the manner you now state?
A. In steps?
Q. Yes.
A. I have no recollection, but I am pretty sure that I did.
Q. You are very sure that you did?
A. I am; I had previously drawn a plan in that way.
568 Q. Has your testimony ever been transcribed?
A. I don't think it has?
Q. Your testimony wasn't transcribed?
A. I don't know; but I haven't read it anyhow.

O. B. SUHR, recalled.

Mr. HENDERSON:

Q. You were directed to run that sixty-foot level?
A. Yes, sir.
Q. And did you go to work at it?
A. Yes, sir.
Q. When?
A. About the 10th of October; I can't state exactly, but it was very close there.
Q. About the 10th of October?
A. Yes, sir.
Q. What did you do; just explain now what you did by way of running that?
A. I staked at a point above Thayer's.
Q. Above what?
A. Above Thayer's. Staked at a point above Thayer's, that was first staked, we had previously run a trial line, so we knew just where to commence on that line. We were working with a level, and staked the line up the canyon about as far as Hanging rock, and for a short distance beyond.
Q. Well, what did you do now as you surveyed it through and leveled it through, by way of marking it?
A. We put up stakes about every 150 or 200 feet apart, wherever the contour changed, where there was an angle in the contour.
Q. What kind of stakes?
A. They were pine stakes about two inches square and a foot or fifteen inches long.
Q. And they were put into the ground?
A. And they were driven into the ground; had probably four inches out of the ground.
Q. Any mark put on them?
A. They were numbered.
Q. They were numbered?
A. Consecutively.
569 Q. State whether the brush was cut along it so as to use the instrument through?

A. It was.

Q. Now, how far up from where you commenced did you see the plugs?

A. The plugs were set——

Q. I understand you that you ran uphill,—upstream first?

A. Yes, sir.

Q. From Thayer's?

A. Yes, sir.

Q. Now, how far did you set these plugs as you went up?

A. They were set to a distance of about 400 or 500 feet above Hanging rock.

Q. Yes, and now what did you do the other way by locating or marking it or surveying it?

A. We didn't do that at the same time, done that a few days afterwards.

Q. Well, go ahead, and just tell what——

A. And we ran out a line in the same manner that we run it up the canyon, and with stakes over on that side about 200 feet apart, and also flagged that part of the line at the same time.

Q. You flagged it from there down?

A. Yes, sir.

Q. Now, just explain the business of flagging it, what you mean by that?

A. We put on, we tied pieces of cloth to stakes three or four feet high, four or five feet high, where there was no brush, and where there was brush we tied cloth to the brush in the immediate vicinity of the stakes.

Q. Well you set stakes all the way along there?

A. Yes, sir.

Q. And those stakes what were they?

A. Well, those were stakes made out of board and slabs, about fifteen or twenty inches long, and anywhere from an inch to two inches wide—thick.

Q. How far did you run that?

A. We ran that line down to the mouth of the canyon, that is down to the cliffs at the mouth of the canyon.

570 Q. Did you take, when you got it down to the mouth of the canyon, did you take a level from there down to the benches below any of them?

A. Not on that line.

Q. Not on that line?

A. No, sir.

Q. And did you now in running that out, state whether you did the same in relation to the brush?

A. Wherever there was brush there we did.

Q. Cut it out so you could operate through?

A. Yes, sir.

Q. And if I understand you, that you made a continuous line surveyed and staked from the mouth of the canyon clear up above Hanging rock?

A. Yes, sir.

Q. Now, when did you get through with that?

A. We finished that about the middle—on, must have been about the 16th of October.

Q. 16th of October?

A. The 17th I guess.

Q. And what time did you commence?

A. About the 10th.

Q. Took you only six days?

A. That is all; didn't take long.

Q. Now, you know where Hanging rock is?

A. Yes, sir.

Q. You are acquainted with that locality there?

A. Yes, sir.

Q. Now, was that the last work that you did?

A. No, sir.

Q. What else did you do after that?

A. Ran several lines down the canyon from various points along the river.

Q. For what purpose?

A. For the purpose of finding a good line for a temporary canal.

Q. That is on this temporary canal?

A. Yes, sir.

Q. That was down pretty well towards the bottom then?

A. Yes, sir.

Q. Oh, yes; and did you continue that work up to the time you quit here?

A. Well, it was on that character of work; we did some cross-sectioning on a line down near Thayer's.

Q. What line was that?

571 A. That was a canal line started about 1,500 feet above the county bridge and running down about 2,000 feet from there.

Q. That was up a little above where the present diverting dam is?

A. No, it — below that.

Q. Below that?

A. Yes.

Q. Oh, yes, you ran that line?

A. Yes, sir.

Q. Any other work that you did?

A. That was—made some—did some office-work in connection with that lower line, calculation, calculations of areas, etc.

Q. How many men now were at work up there in the canyon during any part of this enterprise during the time that you was there?

A. There were from two to ten men at work.

Q. Did they stay up the canyon, camp up there, or did they live out?

A. Yes, sir, they lived there.

Q. They stopped there; you say some office-work, where did you do the office-work?

A. At Thayer's.

Q. Did you take the elevation of that level that they call the sixty-foot level there from the place called Middle rock?

A. I took it from Hanging rock.

Q. Took it from Hanging rock?

A. Yes, sir.

Q. What was it at Hanging rock?

A. It was a little over fifty-six feet at Hanging rock.

Q. Yes; a little over 56 feet; state whether that as it went out from there around—whether there is along there a natural bench?

A. There is a natural bench starting from Hanging rock, all the way down the canyon.

Q. On that level?

A. On the sixty-foot level.

Q. Yes.

A. But it isn't continuous, at points the hillside came down, but beyond the hillside, you always find the bench again.

572 Cross-examination.

By Mr. WEDGWOOD:

Q. Now, Mr. Suhr, what date was it that you went down to work below?

A. Please repeat that question.

Q. What date did you go to work down below the sixty-foot level?

A. It was after—I can't say to the exact date.

Q. Why can't you say as well as you can the date that you went to work on the sixty-foot level and finished?

A. I can't hear what you say.

Q. Why can't you say what date it was as well as you can tell the date you went to work on the sixty-foot level and the date you finished the sixty-foot level?

A. Because the sixty-foot level is the first permanent work I did, and I have a very good idea when I started there.

Q. Well, your work was just as permanent to you one time as another, wasn't it; it was so much a day's pay for you, wasn't it; that is all it was to you; isn't that a fact?

No response.

Q. Can't you answer?

A. I think you have two questions there.

Q. I say that each day's work was so much day's pay to you and one day was just as permanent as the other, wasn't it?

A. Yes.

Q. Now, you say you cross-sectioned down below; where did you commence to cross-section down below?

A. It was, I think, a little after the first of November.

Q. A little after the first of November?

A. Yes, sir.

Q. Cross-sectioning is a work so that an exact estimate of just what is to be done in the line of excavation can be made?

A. Yes, sir.

Q. Isn't it?

A. Yes, sir.

Q. What size of a canal were you cross-sectioning there?

A. I have forgotten the exact dimensions, but I have the notes for it.

573 Q. Well, can you tell approximately?

A. It is about eight feet wide, on the bottom, and probably eighteen on top, ten or eleven feet deep.

Q. Ten or eleven feet deep; it would carry the whole river, wouldn't it?

A. No, sir.

Q. Would it carry as much water as a flume three feet in diameter?

A. What grade?

Q. One foot in a thousand?

A. I think not.

Q. You think that a flume semi-circular flume six feet wide and five feet deep on a grade of one foot to the thousand would carry as much water as a canal eight feet wide on the bottom, 18 feet wide on the top, and ten or 11 feet deep, do you?

A. Very nearly.

Q. Well, the flume will carry very nearly as much, is that right?

A. I think it would carry just as much.

Q. That a flume would carry just as much?

A. Yes, sir.

Q. Then if that flume would carry the whole of the waters of the river at low water, this canal would carry it wouldn't it?

A. Probably would.

Q. Now, where was this canal with reference to the grade of the river, how much below the sixty-foot level, or how much above the level of the river at any particular point?

A. Why, it was thirty feet above the level of the river at Thayer's bridge, something like that.

Q. And that would be how far below this sixty-foot level—oh, approximately? I don't care exactly, I want to get at it somewhere near?

Mr. HENDERSON: What was the question?

Mr. WEDGWOOD: How much below the sixty-foot level would this canal be?

A. I wouldn't make much guess at it, but 18 or 19 feet.

Q. Way down below it?

A. Yes.

574 Q. You commenced to cross-section for that canal after Mr. Nunn was there on the 21st, didn't you?

A. Yes, sir.

Q. Now, these stakes, grade stakes that you speak of were driven within four inches of the top of the ground?

A. Oh, somewhere near; I didn't try to get 'em exactly four inches.

Q. They wouldn't show anybody anything without they would happen to stumble over them?

A. Well, they were plainly visible.

Q. Well, not for any distance?

A. Oh no.

Q. Now, you had completed the work that you did on the sixty-foot level in five or six days?

A. Yes, sir.

Q. How many men did you have working with you?

A. I think at that time I had two.

Q. You had two men?

A. Yes, sir.

Q. Well, what about the duties of those two men, or did they do?

A. Well, one man would rod and the other man would chop brush and drive stakes.

Q. Did you use any chain?

A. No, sir.

Q. Didn't use any chain at all?

A. No, sir.

Q. Didn't even find how long that was?

A. No, sir; only approximately.

Q. Well, what do you mean by approximately?

A. Well, could tell pretty well how long it would be by going over it.

Q. Well, but simply a guess is all that you have given.

A. That is all.

Q. Possibly you didn't chain that sixty-foot level?

A. Yes, sir.

Q. One man held the rod and drove stakes?

A. No, sir.

Q. How was that?

A. No, sir.

Q. How was that then?

A. One man held the rod and the other man drove the stakes and chopped brush.

Q. Then there was only one man chopped brush?

A. That is all.

575 Q. How many miles did you run there in that six days?

A. Probably about four miles.

Q. How much?

A. Probably about four miles four miles and a half.

Q. Four miles and a half, and one man cut all the brush that was cut in four miles and a half, in six days?

A. Yes, sir.

Q. How many hours did you work?

A. About ten.

Q. About ten; there wasn't any great amount of brush cut up there was there?

A. There was considerable brush cut at the upper end of the canyon; there wasn't at the lower end because there isn't very much brush down there.

Q. About how wide a path or strip was it he cut in the brush?

A. Wide enough so I could see through with the instrument.

Q. He just lopped off the branches (illustrating) and might leave it so that you could get a line through?

A. Oh, no, it was plain.

Q. I know, but just answer my question, but did he cut any more brush——

Mr. HENDERSON: Well, that was a plain answer, Mr. Wedgwood.

Mr. WEDGWOOD:

Q. I will ask it now complete did he cut any more brush than was necessary for you to get a line through, and get through with your instrument?

A. No, sir.

Q. Then there was no—the brush, was it cut clear down level with the ground so as to make a plain track of brush cut through, or was it just cut off on the level with your transit?

A. It may not have been cut level with the ground, but it was cut low enough so that I could see through.

Q. Yes, the object wasn't to clear the brush, or the land, as it was established, but simply to get a chance to get a line through there; that is the fact, isn't it, Mr. Suhr?

A. Yes, simply—it was for——

576 Q. Just answer my question; it was for the purpose of getting a line through there?

A. Yes, sir.

Q. Yes; now, you say the markers were put in 200 feet apart down on the lower end?

A. It varied according to the contour.

Q. It varied according to the contour, and without measurement too, didn't it?

A. No special measurement.

Q. The fact of it is that your rodman went out to a certain point and then you would take that, and then he drove his stake there, and went to another point, regardless of distance or anything of — kind, just simply to get a level like.

A. It was a line staked out for the purpose——

Q. Oh, just answer my question; the purpose, I know you are well versed in the purpose; I understand that; but I just want to know what was done.

Mr. HENDERSON: Now, I submit if the court please, that is not a fair criticism.

The COURT: Read the question, Mr. Reporter.

Mr. WEDGWOOD: We have been met with that all the way through here, Judge.

Mr. HENDERSON: Well, we have been——

The COURT: Read the question. (Question read.) Now answer the question, Mr. Suhr.

A. Well, I can't answer it without having to explain.

Mr. HENDERSON: Well, if your honor please, what I objected to was the lecture that followed that.

Mr. WEDGWOOD:

Q. Let me ask you now, if in running that line you ran it to get the level lines simply?

A. Yes, sir.

Q. Did your stakes have any reference to the contour lines, except as a matter of convenience in running the level line?

A. They did not.

Q. Now, did you keep any notes of that survey?

A. Yes, sir.

577 Q. Where are these notes?

A. In my pocket.

Q. Well, let me see them, will you; just turn to them. How many pages do they run there?

A. Well, I don't know.

Q. I will give you the book. Where do they commence and where do they end?

A. That page, and that part, that is part of the same survey, and this.

Q. Now, you neither measured that line nor took any account of curviture or the contour of the country, is that right?

A. We did.

Q. What?

A. We did, yes.

Q. Does your notes show the curviture?

A. The notes don't show it, no.

Q. No, I say you made no notes of the curviture of the country?

A. Oh, no; no, we staked that out as the ditch would follow.

Q. But I say, you made no notes of the curviture of the country?

A. Oh, no.

Q. Nor you made no notes of distance at all?

A. Only as I went over the country, approximately.

Q. Well, you made no notes of distance, I say?

A. No, no.

Q. Now, you are an engineer?

A. Yes, sir.

Q. Before engineering work is decided upon, isn't the length of the curviture, and cross-sectioning, amount of fill, ordinarily in that way taken accurately in field-notes?

A. It is in most cases, yes.

Q. Now, up above Middle rock the stakes you put in were simply grade stakes, level stakes?

A. Simply level stakes, yes, sir.

Q. And they were driven down just near the surface of the ground so an instrument might be set over them in the center of them?

A. That wasn't the idea.

Q. Wasn't the idea; they wasn't driven for that purpose then?

A. No.

578 Q. Well, in setting stakes of that kind level stakes, isn't that ordinarily the way, that they are done, that they are

driven down in that way so that an instrument may be set up over them?

A. No, sir.

Q. It isn't?

A. No, sir.

Q. Was there anything marked on these?

A. Numbers.

Q. Numbers; no levels marked on them at all?

A. Not on the stakes.

Q. Not on the stakes?

A. No.

Q. Now, Mr. Suhr, as an engineer I ask you was that a trial survey, or a final survey, as an engineer let me ask you that question?

Mr. HENDERSON: I object to that, if the court please as not proper cross-examination. I didn't ask him whether he made a final or other survey. I asked him what he did. The question as to whether it was or was not final, he isn't supposed to know.

Mr. WEDGWOOD: I am asking you as an engineer.

Mr. HENDERSON: Yes, I know you ask him as an engineer; and I object to it as an attorney, and ask to have it considered. I asked him as an engineer what he did not as an expert witness to testify to the fact.

The COURT: His direct examination went to the fact that he was an engineer. I think the question is proper.

Mr. HENDERSON: Give us an exception.

The COURT: Read the question.

Question read.

A. It was neither a trial or a final.

Mr. WEDGWOOD:

Q. Neither a trial nor a final?

A. No, sir.

Q. Was it preliminary?

A. Well, it was preliminary, yes, sir.

Q. It was a mere preliminary line. I am asking you as an engineer; I don't care anything about anything else.

579 Mr. HENDERSON: I object to this if the court pleases; I haven't put this man on as an expert in any way.

The COURT: I think he has answered the question.

Mr. WEDGWOOD:

Q. Well, one more question; now, Mr. Suhr, a man standing in the bottom of the canyon, or coming up the canyon road anywhere, or in the bed of the canyon, wouldn't have seen any part of that survey, would he, except the flags on that line?

A. Not unless he came up there, no.

Redirect examination.

By Mr. HENDERSON:

Q. Mr. Suhr, what was your instruction in surveying that?

Mr. HARKNESS: We object to that.

Mr. HENDERSON: Why, on what ground?

Mr. HARKNESS: He has told what he did; if he followed his instructions, very well, if he didn't it don't make any difference.

Argued to the court.

The COURT: Answer the question.

A. My instructions were to run a level line on that line of benches from Hanging rock down to the mouth of the canyon.

Q. What was your instruction as to staking it?

A. My instructions were to stake it in the —, so that any one could, might follow that line; may not have been those words, but that was the intention—might see that line.

Q. That was the substance of it?

A. Yes, sir. An ordinary engineering line.

Q. Then was you instructed as an engineer in any way so to either locating or not locating it, or to do anything else than what you have just stated?

580 Mr. HARKNESS: That again we desire to object to.

The COURT: Answer the question.

Mr. HENDERSON: I will withdraw that and ask another; did you have any other or different or further instructions than what you have just stated?

Mr. HARKNESS: We record the objection.

A. I don't remember any more.

Mr. HENDERSON:

Q. You don't remember any more; well, you have no recollection of any more?

A. No, sir.

Q. Had you any other or further or different authority than what was included in those instructions?

A. No, sir.

Mr. WEDGWOOD:

Q. In other words, you followed out your instructions accurately, did you, Mr. Suhr, as near as you knew how?

A. I think so.

Mr. HENDERSON:

Q. That was true as to what you did?

A. Yes, sir.

Mr. HARKNESS:

Q. One question I would like to ask, when you started on this 60-foot level, where did you first take the level, at what point?

A. At a point above Thayer's, just opposite Thayer's, above Thayer's.

Q. Now, when you started on that direct examination that you took the elevation from Hanging rock, did you mean that after you ran up there you made a trial and found the elevation there?

A. Yes, sir.

Q. That wasn't the point at which you took the initial point to run your level?

A. No, sir.

Mr. HENDERSON:

Q. By the way, one further question; you stated to Mr. Wedgwood here that that was neither a final or a trial survey, but
581 was rather in the nature of a preliminary; what do you mean by preliminary?

A. Why, we already had some idea where this line was going; it wasn't a mere trial line, because we knew already that it would follow somewhere near that line of benches.

Q. Yes, well——

A. And trial lines——

Q. (Int.) Now, what was this for; what was this survey for?

A. It was——

Q. Was it to locate this exact line?

A. To locate the exact line, and in fact to confirm; it was to show the exact elevation on which this line would cross these benches, that line of benches.

Q. Well, then, wherein, tell me wherein it differs from a final, from a location line; let me see if I understand that; do you say there was a row of benches succeeding each other along down through there at this altitude?

A. Yes, sir.

Q. Now, do I understand you to say that the purpose of this survey was to locate——

Mr. WEDGWOOD: We object to it as leading.

The COURT: Avoid leading as far as you can.

Mr. HENDERSON: How was that?

The COURT: I say avoid as far as possible leading questions.

Mr. HENDERSON:

Q. Tell me wherein that differs from a location survey, if it was located to tell where the ditch would come; tell me how it would differ?

A. Well, the only practical difference is while the ditch would go on a slight grade, this was a level line; otherwise it would be about the same as a final.

Q. That is on a grade, what do you mean by a grade?

A. The bottom of the ditch is not level.

Q. The bottom of the ditch?

A. Yes.

Q. Well, you was laying out a survey of the ditch, wasn't you?
A. Yes, sir.

582 Mr. HARKNESS:

Q. A ditch that would run water could not be run on the line you surveyed could it?
A. Not exactly.
Q. Did you put in any curves?
A. We followed the contour; put in no curves.
Q. Only the contour of the country but your final survey of the ditch line would have your curviture marked, would it not?
A. You mean horizontal or verticle?
Q. I didn't get the answer.
A. I don't understand your question.
Q. I say, before you would construct a ditch you would have a survey showing the curves in it, would you not?
A. Not necessarily.
Q. Not necessarily?
A. Might run it out on the ground without having a plat of it.
Q. You would have to stake it to get your fills and cuts wouldn't you?
A. In running a ditch line following the contour of the country you would not—it wouldn't be necessary to have any fills.
Q. Or cuts?
A. Or cuts.
Q. Well, did you follow the exact contour?
A. Yes, sir.
Q. But your line was a level only?
A. Yes, sir.
Q. How much would the ditch rise to flow water, any grade?
A. It wouldn't rise; it would go below the——
Q. What?
A. I say it wouldn't rise; it would go below.
Q. Well, the grade would rise one way and fall the other, would it not?
A. Yes, sir.
Q. To run water?
A. Well, that would depend altogether on the size of the ditch.
Q. Well, it wouldn't be level, it would have some grade?
A. It would have some grade, yes, sir.
Q. Now, in that four miles and a half at the south end, how much would it taper at the south end from the northeast end?

583 A. That would depend altogether upon the size and the shape of the ditch.

Q. Well, what would you estimate the fall of water to be per hundred feet or thousand feet?
A. In a very large size ditch it would probably with proper area in proper shape, in order to get the least fall, least grade, the grade need not be more than a foot to the mile.
Q. A foot to the mile?
A. In a very large ditch of a proper shape.

Q. A foot to 5,280 feet?
A. I think that is right; if my memory serves me right.
Q. What?
A. Yes sir.
Q. It wouldn't carry but a small amount of water would it?
A. It wouldn't have a very fast velocity.
Q. Well, that would effect the amount it would carry?
A. Yes, sir; effect the shape of it and the size of it.
Q. Did you ever know a ditch run as low as that to the mile?
A. Yes, sir; I think so.
Q. Would it carry much water in it?
A. And there was a large volume of water in it?
Q. Well, could you deliver a very large amount on a fall of that kind?
A. Yes, sir.
Q. It would have to be a very large ditch, would it not?
A. Yes, sir.
Q. Was there any dimensions spoken of for this ditch?
A. Not that I remember now.
Q. Well, take it at a foot to the mile, four miles and a half, would make four and a half feet?
A. Yes, sir.
Q. How much would that throw the north end of your ditch elevated above your line of stakes, four and a half feet difference in the level?
A. It would be the same at the upper end; and depart from it at the lower end according to the slope of the ground.

584 Adjournment taken until Saturday April 23rd, at 9.00 a. m.
Resumed session Saturday.

E. A. BUCKLER, sworn for the defendants.

Examined by Mr. HENDERSON:

Q. Where do you live Mr. Buckler?
A. At Provo City.
Q. How long have you lived there?
A. Eight years.
Q. What is your business?
A. Civil engineering.
Q. You know the Provo canyon, do you?
A. Yes, sir.
Q. And the Provo river?
A. Yes, sir.
Q. Did you at any time do any work up there?
A. Yes, sir.
Q. And in what years?
A. In 1896.
Q. In '96; now, do you remember what time you commenced?
A. May the 17th.
Q. May 17th?

A. Yes, sir; that is regular work. I had done a little in connection with this work before.

Q. Now, when was it you did that little before?

A. I think it was in March; some time in March.

Q. Did you make—at any time during the summer of 1896, at any time make an examination of any railroad work that was done up there?

A. Yes; I think in November, '96.

Q. In November '96?

A. Yes, sir.

Q. Did you examine the entire line of road through the canyon at that time?

A. Yes, approximately, I——

Q. Where did you find any work done?

A. Above the Hanging rock there were several pieces of grade.

Q. What time was it?

A. In November, '96.

Q. Go on.

A. I found several stretches of finished grade made.

Q. Finished work?

A. Yes, sir.

Q. Well, how long; how much of it, the stretches, in length?

A. There was a length of grade of 400 feet, a little way above the Hanging rock, and there were two pieces up just above
585 the South fork, amounting to approximately 200 feet in length.

Q. Now, did you make an estimate of that work?

A. I did.

Q. And what was there of it; what estimate did you make of it?

A. Well, I estimated the cost of it at $960.

Q. $960?

A. Yes, sir.

Q. Now, did you find a little piece that was disturbed over on the north side of the river?

A. Yes, sir.

Q. How much was there of that?

A. I think a leng*ht* of about 250 feet.

Q. Did you include that in the estimate?

A. Yes, sir.

Q. Now, at any other place in the c*an*yon was there any grading, work of any kind done?

A. I think not.

Q. Was the line cleared off, the ground cleared off along the line, wollows cut and cleared?

A. Yes, there had been some cutting.

Q. Where?

A. Well, all along the line of survey and some just above Hanging rock on——

Q. All along the line of survey was cut off, how wide?

A. Oh, just wide enough to see through with the instrument.

Q. Yes, but I am not talking about that, but was the ground cleared off along the line?

A. No.

Q. Wide enough for a grade?

A. Only where the grades had been made.

Q. Well, I mean outside of that?

A. Outside of that I think not.

Q. No, it was——

A. (Int.) Excepting one place just on the north side of the river by the Hanging rock; there was about 400 feet cleared.

Q. Yes, well, that was right near where the grading was done?

A. Right near, yes.

586 Q. Yes; now this that you saw on the north side, and this that you saw on the south side, state whether they were nearly opposite each other or across the river?

A. They weren't exactly opposite.

Q. But nearly?

A. But nearly so. I could illustrate on the board just exactly.

Q. How is that?

A. I could illustrate on this board.

Q. Well, yes, illustrate on the board how that was.

A. That was the finished grade; here for about 400 feet cleared brush; this is the Hanging rock here, and this the other side of the river, with the Hanging rock here.

Q. Now, tell me where was the grading done if any on the north side.

A. The north side, there was some grading here.

Q. It was substantially on opposite sides of the river then?

A. Yes.

Q. And nearly opposite to each other?

A. Yes, sir.

The COURT:

Q. The upper part of the board is understood to be east?

A. No, the upper part is northeast.

The COURT: Northeast?

Mr. HENDERSON:

Q. Yes; now at any time did you run any, either of these lines either the sixty or the 85 foot level?

A. Yes, sir; I ran the sixty-foot level from the Hanging rock to the mouth of the canyon.

Q. To the mouth of the canyon?

A. Yes, sir.

Q. State whether you ran, or what kind of a line that was, whether it was a transit line or not?

A. I ran a grade line first and put in stakes, and then I ran a transit line the full length of the way, and had all the brush cleared off.

Q. When was that?

A. That was I think in August, 1896.

Q. How far above Hanging rock did you run that level?
A. I didn't go above Hanging rock.
Q. Oh, you didn't go above Hanging rock?
587 A. Just from Hanging rock down.
Q. Ran from Hanging rock to the mouth of the canyon?
A. Yes, sir.
Q. Ran the grade line?

Mr. WEDGWOOD: We object to your leading, Judge Henderson just puts the words in the man's mouth.

Mr. HENDERSON:

Q. Well, you just state that again, if you will.
A. I ran a transit line from Hanging rock to the mouth of the canyon, and no line above Hanging rock.
Q. I am asking you below?
A. Below, yes.
Q. Did you say you ran a grade line?
A. I ran a grade line. Yes.

Cross-examination.

By Mr. WEDGWOOD:

Q. You say you done some work in March Mr. Buckler, when was that, what date in March?
A. My recollection was about the middle, I couldn't tell exactly without my note book; it was about two days' work there.
Q. And where was the work done?
A. I checked some levels from the old county bridge up to Ferguson's house, and I established a line, that is the elevation for a line about half a mile below Thayer's house.
Q. Below Thayer's house?
A. Yes, sir.
Q. At what elevation did you establish that line from the river, approximately?
A. I think 125 feet above the river at that point.
Q. Then was that a line above the sixty-foot line?
A. It was a point on the line.
Q. Above the sixty-foot line?
A. No, sir; it was below.
Q. Below the sixty-foot line?
A. I think it was below.
588 Q. Was it below Thayer's house?
A. Yes, sir; it was half a mile below Thayer's house.
Q. Well, I mean in point of elevation, did it run below Thayer's house?
A. No, it was above Thayer's house in elevation.
Q. And between Thayer's house and the sixty-foot level in elevation?
A. I should say so.
Q. And the line you ran up the river where was that, so far as elevation was concerned?

A. That was merely checking two levels. I ran up along the river merely to get the difference between one point and another.

Q. You ran up along the canyon road?

A. Yes, I merely wanted to locate two points that day. It didn't matter where I ran.

Q. Now, you say you ran the sixty-foot level, Mr. Buckler?

A. Yes, sir.

Q. What did you do?

A. I ran the level along it to find the grade where the line would run; and then after reaching the mouth of the canyon I ran the transit line over it and located it, so as to make a map of it.

Q. That was in August?

A. That I think was in August.

Q. Did you have any notes of any previous survey to go by.

A. I didn't refer to any other notes.

Q. Well, did you have any to go by?

A. No, I did not; I didn't see any. I understood they had some.

Q. Well, never mind, Mr. Buckler, I don't ask you what you understood; you didn't have any notes of any previous lines at all?

A. Not in my possession.

Q. And didn't run according to any previous line then?

A. I didn't try to stick to any previous line.

Q. In making that line in August, you didn't run it in any way tied or connected it with any other line that had been previously run?

A. I believe that that did connect with another line.

589 Q. Just please answer my question, Mr. Buckler. Read the question.

Question.

A. I did at the start.

Q. I didn't quite catch that answer?

A. I did at the start.

Q. You did at the start?

A. Yes, but I was running on a slightly different grade.

Q. Yes, we will get to that in a minute, Mr. Buckler; did you connect at the start by any written data?

A. Yes sir.

Q. Where did you get that?

A. The written data?

Q. Yes.

A. Well, the grade was made——

Q. Well, I asked you if you connected it where you started with any written data?

A. I didn't have any written document in my possession; it was in the office though.

Q. I didn't ask you that, Mr. Buckler.

Mr. HENDERSON: He said it though.

Mr. WEDGWOOD: I know he did.

Q. Now, you went up on the hill there and found a stake planted or a peg?

A. I found 500 feet of grade actually made.
Q. You found 500 feet of grade actually made?
A. Yes, sir.
Q. Whereabouts was that?
A. From the Hanging rock running down towards the mouth of the canyon.
Q. Now, did you commence at the Hanging rock?
A. Yes, sir.
Q. And ran along that grade?
A. Yes, so as to connect it with the other property.
Q. Well, you commenced at the Hanging rock and ran along that grade as far as it was made?
A. I ran it along that grade so as to make a map of it.
Q. I didn't ask you that, Mr. Buckler. I just want to know just what you did?
A. Yes, I did that.
Q. After you got to the end of that grade did you run with anything, with reference to anything that had previously been run there?
A. By documents, no sir.
590 Q. Did you by anything that was on the ground?
A. For about a mile, yes, and then my grade varied from the other grade.
Q. Varied from the other grade?
A. Yes, mine was a little steeper grade, so that it got a little farther away from it the farther I went.
Q. What do you mean by a steeper grade?
A. I think that first grade was run——
Q. I don't care Mr. Buckler.
A. I thought you were asking me the difference between the grades?
Q. Yes?
A. The first grade was run with one foot to the mile, and my grade was one foot in a thousand feet.
Q. What do you mean by the first grade; the point that you went over that you found graded, from Hanging rock down?
A. Yes, sir.
Q. That was one foot to the mile?
A. Yes, sir.
Q. Well, after you got beyond that point I say, did you run with reference to anything?
A. I found stakes.
Q. You found some stakes?
A. Yes.
Mr. HENDERSON: He said he found stakes.

Mr. WEDGWOOD:

Q. Yes. Now, after you got down the river a mile, did you find anything?
A. A mile?
Q. Yes.

A. Yes, I think I found the two miles or more.
Q. Found some stakes for two miles or more?
A. Yes.
Q. Now, what grade was you running on?
A. On one foot to the thousand feet.
Q. One foot to the thousand feet; that is you would be running downhill one foot in a thousand feet?
A. Yes, sir.
Q. As you went towards the mouth of the canyon?
A. Yes, sir.
Q. Now, the cost of this work that you spoke about; was this four or 500 feet that you spoke about, was it grade or excavation?
A. It was partly excavation and partly grade, along the side hill.
Q. Was it a flat open cut upon the hillside?
591 A. Made by partly grade and partly excavation.
Q. Is that what you mean, or was it a depression in the ground?
A. The hillside ran that way (illustrating).
Q. Yes.
A. It was cut out here and filled in there; that was the section of it. It was cut out in the hillside there, and filled in here.
Q. It wasn't a canal?
A. Not a canal, no; the railroad grade.
Q. How, is that?
A. A railroad grade; you were referring to the railroad grade, wasn't you?
Q. No, I was refferring to the sixty-foot?
A. Oh, what I found was mostly excavation on the sixty-foot.
Q. Mostly excavation?
A. Yes, sir.
Q. Was it excavation or a depression in the ground for a canal?
A. No, sir, it was flat.
Q. It was flat?
A. Flat.
Q. A flat bench?
A. A flat bench.
Q. Do you know when that was done, of your own knowledge?
A. No, it was done before I saw it there.
Q. And your work was done in August?
A. And my work was done in August, I think.
Q. Now, you say you found completed railroad grade in November for a certain distance?
A. Yes.
Q. And you found a complete railroad grade on the sout- side of the river?
A. Both sides of the river.
Q. Both sides of the river; and the grade on the south side farthest, was the grade on the south side farthest west, down the canyon?
A. No, it was more east.

Q. Well, speaking of more east?
A. In relation to what?
Q. Well, in relation to the we will say the Ferguson place or the end of the canyon, the Provo end of the canyon?
A. I didn't quite catch your question.
Q. Well, the grade, did you find any grade on the side
592 southwest of the Ferguson place?
A. The Ferguson property?
Q. Yes.
A. The only grade—well, I didn't see any grade on the Ferguson place.
Q. Oh, I said west of the Ferguson place?
A. Oh, west?
Q. Did you find any west of Hanging rock?
A. Railroad grade west of Hanging rock.
Q. Down the canyon from Hanging rock, or Middle rock?
Q. No, I don't think I did
Q. Where did you find it with reference to that?
A. It was all above the Hanging rock?
Q. All the railroad grade was above the Hanging rock?
A. All was made——
Q. All that was made?
A. At that time, except half a day's work, or three-quarter's of a day's work close by the side of the Hanging rock on the south side.
Q. On the south side?
A. Yes, that is men worked about three-quarters of a day.
Q. This grade you found on the south side—you followed the railroad line there had you not?
A. I had followed it up a good deal, yes.
Q. It was on the line of survey across the Ferguson place was it not?
A. Why, I suppose it was.
Q. To the best of your judgment it was?
A. Yes.
Q. And the grade you found up by the North fork——
A. South fork.
Q. South fork, that was on the same line?
A. That I think was on the same line.
Q. Now, some work that you found on the south side—you are a railroad engineer?
A. Yes, sir.
Q. Was it in the nature of what is called a channel change?
A. Oh, no, this was an embankment.
Q. That was what?
A. An embankment.
593 Q. Did you find any work done there in the nature of a channel change?
A. Yes, sir.
Q. That you didn't mention did you?
A. I think I did.

Q. You did find work done on the north side in the nature of a channel change?

A. That was the north side of the river.

Q. Yes, and was that so to the end that the line might be built on the south side as laid out?

A. I don't know what it was for; it might have been the barrow pit to make the embankment with.

Q. Well, ordinarily when there isn't room enough on one side of the river, or the course of the river would prevent, a channel change is made so as to get more room on one side or the other of the river; that is a frequent practice, is it not?

A. Sometimes, yes.

Q. And how much grade do you say there was there all told?

A. About 600—or, no, about 850 feet altogether.

Q. 850 feet?

A. Lineal feet.

Q. And that was graded completed grade, ready for the rough laying of the track?

A. On the south side of the river, yes.

Q. Yes, and your judgment, can 800 feet of grade be built for 950 dollars, a dollar a foot?

A. Some of it is very low.

Q. How is that?

A. Some of it has very little work on it; very little necessary work.

Q. Well, I ask you in your judgment if that can be done?

A. Yes, I think that can be done for that price.

Q. That would be very cheap wouldn't it for railroad work, canyon work?

A. No, my figures were high for present railroad work.

Q. Were high?

A. According to the testimony on the other case.

Q. That would be $950 for 800 feet of work, completed railroad grade was a high figure in that case?

A. In that case, yes.

594 Mr. HENDERSON: Now, I want to offer some testimony that was given on the trial below by Mr. Dodge, and for that reason I want to swear the stenographer.

Mr. HARKNESS: We will waive it.

Mr. HENDERSON: Yes, they will waive that; now, I want to turn to Mr. Dodge's testimony, and I want to inquire if Mr. Dodge gave certain testimony. Now, in order to save time of doing that I am entirely willing that this abridged transcript is considered in evidence as it was given there in evidence. There is some portions of it that I don't care to offer as our testimony-in-chief. I have no objection to its all going in upon their examination.

Mr. HARKNESS: If it is offered at all, I ask that it all be offered.

Mr. HENDERSON: Mr. Stenographer, you just turn in that record to Mr. Dodge's testimony.

Mr. HARKNESS: Judge, what difference does it make who offers it?

Mr. HENDERSON: It makes just this difference: If I offer the testimony of a witness, if I take it and offer the statement made by a witness I am bound by it.

Mr. HARKNESS: Very well, we will offer it, that is if you want it; you will consent to put in the whole thing.

Mr. HENDERSON: Yes, all right.

The COURT: Let it all go in.

Mr. HARKNESS: Do you want the exhibits?

Mr. HENDERSON: The letters?

The COURT: It will be understood then that it is all admitted?

Mr. HARKNESS: Admitted by consent of both parties.

Mr. HENDERSON: Yes, admitted by the consent of both parties; so that that is the only reason we are not offering the whole of it consecutively.

595 Mr. HARKNESS: There was one of these documents, I don't know that that appears, that we dispute the construction of, I don't know that that appears—yes, it does appear. We claim the word that they read as "cost" should be "cash."

The COURT: Is that a part of that record, or is it another telegram.

Mr. HARKNESS: No, it is a part of that same record.

Mr. HENDERSON: That is a part of that same record, it is in relation to one of the telegrams that was in cipher, and the word "cost" seems to have been disputed as the word "cash."

Mr. HARKNESS: Have you got that so that the reporter can identify it?

Mr. HENDERSON: Well, I will do it right now. It is the testimony of D. C. Dodge, commencing on the printed record on page 175 and extending in his testimony to and including page 181, and then it is the correspondence following that and referred to in testimony to and including the folio 444 on page 196.

Mr. HARKNESS: Yes; the abstract being that in the case of the Rio Grand- Railroad Company, against the Telluride Power Transmission Company and others.

Mr. HENDERSON: Yes, that is right.

L. HOLBROOK, sworn for defendants.

Examined by Mr. HENDERSON:

Q. Where do you live Mr. Holbrook?

A. Provo.

Q. Do you know the Telluride Power Transmission Company, do you know that?

A. Sir.

Q. Do you know of that company?

A. Yes, sir.

Q. You know Mr. L. L. Nunn?

A. Yes, sir.

Q. P. L. Nunn?

A. Yes, sir.

596 Q. Did you become in any way connected with the enterprise in Provo canyon that has been talked about here?

A. Yes, sir.

Q. At what time?

A. I first met Mr. L. L. Nunn in September, '94, and in I think the latter part of that month.

Q. State whereabouts you in company with him explored the canyon?

A. We did either the last part of September or fore part of October, '94.

Q. What did that exploration consist of, what did you do?

A. We rode up and down the canyon.

Q. That was all, was it?

A. Yes, sir; at that time.

Q. Now, when did you and Mr. Nunn further explore the canyon or do anything in relation to it?

A. Well, there was an engineer sent down before Mr. Nunn came again.

Q. An engineer?

A. Yes, sir.

Q. Was that soon after that?

A. Yes, sir.

Q. And then did you have any connection with the work done by him?

A. Beg pardon?

Q. Did you have any connection with the work done by him?

A. Yes, sir.

Q. Just go on and explain what it was, and what you and he did?

A. Mr. Matthis of Salt Lake came down, I think in about six to eight days after Mr. Nunn and I went up the canyon, and ran a level, and posted a notice.

Q. Yes, and what kind of a level was run at that time, just the general character of it?

A. Well, we just simply run a level to find where there would be the greatest fall in the shortest distance in the river at the time.

Q. That is, it was simply a level run right along by the road, or the river?

A. Yes, sir.

597 Q. And at that point the level between the level that you run was running and the river bed would be taken?

A. Yes, sir.

Q. Now, how long did that work continue that fall at that time?

A. I don't remember just how many days, but I think only a few days; probably four or five days; might have been ten.

Q. Let's see; that was in '94?

A. That was in the fall of '94.

Q. Now, was anything else done that fall?

A. Yes, sir; I put men to work.

Q. What doing?

A. Cutting brush and doing some other work.

Q. Cutting brush and what?

A. Cutting brush and doing some other work; principally cutting brush.

Q. On what line was this?

A. That was on the preliminary line that Mr. Mstthis ran there at that time.

Q. Now, that was all that was done that year, was it?

A. Yes, sir.

Q. Now, what was done the next year?

A. Well, that work——

Q. Well, in the first place, I will withdraw that. When did you commence the work again the next year?

A. I believe not until the fall of '95. Of course there were men employed steadily. Mr. Thayer was employed all the time—during the time the first survey was made in the canyon.

Q. Now, Mr. Holbrook, I don't care to go over in detail that summer or fall's work. I want to call your attention to some things in connection with it. Do you know Mr. Suhr?

A. Yes, sir.

Q. Did you see him that fall?

A. The fall of '94?

Q. '95?

A. Yes, sir.

Q. Did you know of his doing any work up there?

A. Yes, sir.

Q. Now, I will ask you if you remember the time when Mr. Nunn and Mr. Campbell, the president of the company, and Mr. Bailey and Mr. P. L. Nunn came out here?

A. I remember about that time. I wasn't here the very day. I was over at Tintic.

Q. You knew about such a visit?

A. Yes, sir.

598 Q. That they made here; you knew about that time?

A. Yes, sir.

Q. Now, I want to ask you if at or about that time there was anything done about the level that is known or called here sixty-foot level?

A. Yes, sir.

Q. What?

A. Mr. Suhr ran that level.

Mr. HARKNESS:

Q. Was you there Mr. Holbrook?

A. Yes, I was up and down repeatedly at that time.

Q. Did you see him running it?

A. No, I didn't see him running it.

Mr. HENDERSON:

Q. Well, do you know whether he was directed to run it?

A. Yes.

Q. And state whether you saw it, or saw stakes after it was run?

A. I did.

Q. Was you up there on the ground at that time?

A. Yes; went over the ground some three miles, from something like a mile and a half or two miles below Thayer's to clear up to the Hanging rock, both in the fall of '95 and the spring of '96, walked over the level.

Q. Now, just state what the condition was on that line.

A. Well, it was a pegged line with surveyors' plugs, and occasionally when a plug would come in the brush there was a little flag put upon *and* oak brush, tied over these points or pegs, clear down over the line as far as I went.

Q. And that went clear up to Hanging rock?

A. I went clear up right on top of the Hanging rock on the north side of the river.

Q. Now, at that time was you taking any active interest in cooperating in this enterprise?

A. Yes, sir.

Q. Did you know at that time what the enterprise consisted of so far as the development of power there?

A. Yes, sir.

Q. What was it?

A. That we thought we would be able to develop——

599 Mr. HARKNESS: Well now, is this a matter of their plans or intention that you desire to call out.

Mr. HENDERSON: A matter of what they were doing, what their business plans was.

Mr. HARKNESS: Just read the question, Mr. Reporter.

Question read.

Mr. HARKNESS: Well, I think we will make an objection to stating what the enterprise was or plan was as immaterial; what they did is only notice to the public.

The COURT: What they did has been admitted. Let it be admitted.

Mr. HENDERSON:

Q. What was the intention at that time?

A. Building a reservoir.

Q. And to build how high a reservoir?

A. The canal was to be sixty feet; the water raised back twenty-five feet higher, so that they might draw it at sixty foot, what was known as the sixty-foot or Suhr level.

Q. Yes, and what was the intention as to the means and manner of getting the power with which to do the work?

A. There was to be a temporary plant put in first to assist them in the work.

Q. Now, you say you also went over that line again in the spring of '96?

A. '96, yes, sir.

Q. Now, Mr. Holbrook, calling your attention to the Hanging rock up there particularly, you know that point?

A. Yes, sir.

Q. Do you know anything about whether there was any work

done up there either in the fall of '95 or in the spring of '96 at or about the Hanging rock?

A. There was in the spring of 96; I am not so positive as to the fall. There was some grading done in the spring of '96, and some brush cut.

Q. How early in the spring of '96?

A. Well, I don't remember the exact date; I know it was
600 before the snow was fully off; the snow was on in spots. I remember walking over the snow.

Q. But the particular date you don't remember?

A. No, I don't remember.

Q. Now, was there some work done there other than the cutting off of brush?

A. Yes, on the north side the dirt was cleared off from the top of the rock where it breaks across the top of the canyon; leveled down, and there was also some work done, some pits dug in the bottom of the canyon, and I believe some brush cleared also in the bottom of the canyon.

Q. Mr. Holbrook, did you have any personal supervision of directing the work or was you simply there at times looking it over?

A. Not at that time; I did in '94 and until late in '95.

Q. About in '96?

A. No sir; I didn't have any supervision; I just simply went up there frequently and looked over it.

Cross-examination.

By Mr. HARKNESS:

Q. You first went up in September, '94?

A. Yes, sir.

Q. That was only a buggy drive up and down the canyon?

A. That is all.

Q. After Mr. Matthis came you went up again?

A. Yes, sir.

Q. What month was that?

A. That was early in October.

Q. Did you make a more extended examination of the canyon at that time?

A. No, I think not.

Q. Where did Matthis run his line?

A. He started from below Thayer's house I believe, and about to the mouth of the canyon; I am not positive how far down, and ran up a little ways above what was known as the county bridge, or Bridle Veil falls.

Q. How near did any part of that line come to Hanging rock?

601 A. I don't know just how far Hanging rock is above the bridge. I think he ran the line some while I was there, probably 200 or 250 feet above the county bridge, about opposite the Bridle Veil falls.

Q. Yes; did he make any notes of that survey?

A. I could not say.

Q. Was it a level or a tangent line?

A. I could not say he had his instrument along and a man helping him.

Q. Did he set any stakes?

A. I don't know that.

Q. But it followed nearly the bed of the river, as I understand you?

A. Pretty nearly, yes, sir; not very high.

Q. Now, you say a notice was put up, who put that up?

A. Who put the notice up?

Q. Yes, sir.

A. I did.

Q. Did you sign it?

A. Yes.

Q. Where did you put that up?

A. That was put up close to the river, I think about six feet above the bed of the river, and about opposite Bridle Veil falls.

Q. What?

A. About opposite Bridle Veil falls, and about six feet above the bed of the river.

Q. On the south side of the river?

A. On the south side of the river.

Q. How far is that place you call Bridle Veil falls from the county bridge?

A. It was about 200 or 250 feet I should say.

Q. Could you recognize a copy of that notice if I showed it to you?

A. I think so, yes, sir.

Q. (Exhibiting paper to witness.)

A. I believe that is the notice.

Q. Did you cause the notice you put up to be recorded?

A. Sir?

Q. Did you cause a copy?

A. Yes, I had it recorded.

Q. Perhaps you could be more certain if I showed you the recorded copy?

A. Yes, perhaps there might be a word or two in, but I think that is the notice.

602 Q. Well, I saw it here the other day; I will not stop to look it up now; how did you put up that notice, in what way?

A. I put it up in a box, and tacked the box to a tree that was growing there, a cottonwood tree, I believe.

Q. How long did it stand there?

A. I don't know, could not say.

Q. How?

A. I don't know.

Q. When did you last see it there?

A. Well, I could not say that; I saw it a time or two afterwards, and saw it there, but don't remember what dates.

Mr. HARKNESS: I will just put that in.

Mr. HENDERSON: We have no objection to its going in as a part of their examination.

Mr. HARKNESS: Yes.

Marked by reporter "Pl'ff's Ex. 7, D. H. R."

Q. At what time did you employ Thayer to work, was that in the fall of '94?

A. Either immediately before or at the time of posting the notice.

Q. Where did he do his work?

A. I think below this notice, cutting brush. It was on the side near where the house now stands.

Q. Did he work there all winter?

A. I think so; I paid him all winter.

Q. And his work was done there?

A. Yes, sir.

Q. You say I think that you saw the sixty-foot level?

A. Sir?

Q. I think you have stated that you saw the sixty-foot level in the fall of '95?

A. Yes.

Q. Did I get the time right?

A. Yes, the fall of '95.

Q. What did you find there?

A. I found stakes stuck along.

Q. What kind of stakes?

A. Surveyors' plugs.

Q. How high above the ground?

603 A. Well, now, they weren't very high as a rule; however there was several that were quite high, but I think they were generally what is known as surveyors' plugs.

Q. How far did you trace that sixty-foot level in the fall of '94?

A. I didn't trace it at all in the fall of '94.

Q. The fall of '95, I have got the year wrong.

A. '95, well I traced that from, I should say three miles, went over it from below, I believe below where the work is now.

Q. Below where?

A. Below where the power plant is now established, to the Hanging rock.

Q. Yes, to the Hanging rock?

A. Walked it over.

Q. Did it go above the Hanging rock?

A. No, I didn't; I stopped at the Hanging rock; walked up on the Hanging rock and stopped.

Mr. HENDERSON: Wait a moment; he asks if it went on, and he answers that he——

Mr. HARKNESS: Yes.

A. Oh, I could not say whether the survey went above Hanging rock.

Q. Then in the spring of '96 you went over that level?

A. I went over that in '96, yes, sir.
Q. About what time was that?
A. Very early in the spring, I could not say what time.
Q. Was it in the same condition that you saw it in the fall of '95?
A. The same what, survey?
Q. The same condition, was the level the same?
A. Yes, practically.
Q. Now, I understand you to say, Mr. Holbrook, that some time in the spring of 1896 you saw grading at Hanging rock, and brush cut?
A. Yes, sir.
Q. What was the grading?
A. It was a grade similar to what was down below, where the flume was placed, a sort of bedding for the flume.
604 Q. At the Hanging rock?
A. A little ways below. I think that did not run quite to the Hanging rock.
Q. Well, how far below, I haven't heard of any——
A. Well, I should say not more than two or 300 feet, just a little ways below.
Q. How much grading was there two or 300 feet below?
A. I don't remember, I think about two or 300 feet.
Q. Do you know where Middle rock is?
A. Yes, sir.
Q. Was it down there?
A. No, I believe it was about there; to my recollection.
Q. Now, are you sure of that, Mr. Holbrook, that you saw grading there at all?
A. Well, that is my best recollection.
Q. Then it wasn't at Hanging rock?
A. Well, not right immediately at Hanging rock.
Q. What was the grade for; what did it appear like?
A. Like the grade below, that we put for the purpose of putting the flume on.
Q. For the flume?
A. Yes, sir.
Q. Seemed to be part of that grade?
A. Yes, sir.
Q. Now, can you say, Mr. Holbrook to your best recollection to any certainty, that you ever saw any grading above Middle rock, or between it and Hanging rock?
A. Why, I think so; I believe it was above there shortly; I believe what is known as Middle rock and Hanging rock; that is my best recollection.
Q. That is your best recollectio-?
A. Yes, sir.
Q. Now, you say work was done, cutting brush at Hanging rock, or had been done?
A. Just a little below Hanging rock.
Q. Just a little below Hanging rock?

A. Yes, sir.
Q. And how near to Hanging rock?
A. My best recollection is that almost immediately below, there was a patch of oak brush.
605 Q. What?
A. Immediately below Hanging rock there was a patch of oak brush, and I am not positive whether the line ran above that or not; for a short distance it was cut through; I know a short distance below that there was quite a space of clearing.
Q. Now, are you speaking of the river bed now?
A. No, sir; I am speaking of the sixty-foot level.
Q. Of the sixty-foot level; I got the impression that at the rocks you found evidence of some work?
A. Oh, that was on the south side.
Q. On the south side?
A. Yes, sir.
Q. Now, I would like to have you be a little sure, Mr. Holbrook at what date you saw that work on the south rock?
A. Well, I could not say as to the date. I am sure it was very early in the spring.
Q. Can you say you saw any work on that rock previous to July, '96?
A. Oh, yes, because I know there was snow on the ground when I went over the line, and I saw work there then.
Q. What work was there then?
A. The south side?
Q. Yes, on that rock?
A. Well, the rock was cleared off, as I say, I did not go over there. I could only see it from the other side; it looked to be considerable work, cleared off.
Q. How large a space was cleared off?
A. I could not say.
Q. Would it amount to a yard square?
A. Oh, yes, a good many yards square.
Q. Well, give me your recollection as to the size?
A. I couldn't give you any idea of the size; I might not come within fifty feet of it.
Q. How high up the rock was that work done?
A. I could not say; I presume, I should judge 25 or 30 feet above——
Q. Above the bed of the canyon?
A. Above the bed of the canyon, to look at it from the opposite side.
606 Q. Well, did there seem to be a dump there?
A. Yes, they were dumping the dirt into the river, as I remember, just running over the rock and dumping into the river.
Q. Were men at work when you was up?
A. Yes, different times.
Q. How many men?
A. I don't remember; I saw three or four there I could not say just how many.

Q. Ever see any work on the north rock previous to that time?
A. No, I think not, outside of the brush and the work below.
Q. You spoke of pits, what were they?
A. Holes in the ground.
Q. What?
A. Holes in the ground.
Q. How large?
A. Well, now, I believe they were some ten or 12 feet long, and probably four or five feet wide.
Q. How deep were they?
A. I don't remember.
Q. How many of them?
A. I saw one or two of them that I think are—I think there was three or four of them—one or two of them that I looked at had water in the bottom so I could not tell.
Q. Were any of them dry, without water in the bottom?
A. I think not.
Q. Then you don't know how deep they were?
A. No, sir.
Q. Were they between the rocks?
A. Well, from my recollection they were in a straight line across.
Q. I think you said some brush had been cut up there in the bed of the canyon; am I correct?
A. Some brush?
Q. Yes.
A. Yes, sir; there was some brush.
Q. How large an area?
A. Oh, I don't know, there was quite a lot of brush cut there. I could not say just how much.
Q. Well, it was cut off where these pits, had there been brush where these pits were sunk?
607 A. No, I think it was cut up above those pits, as I remember; between there and the river.
Q. Was it cut off below the rock too? Did the area that was cut extend below the rock?
A. No, I think not, not on the line across the river.
Q. Do you remember what time you first went up there in the spring of '96?
A. No, I don't; don't remember the date.
Q. Have you had any charge of it since '95, any charge of the work yourself?
A. No, sir.
Q. That is all. Oh, by the way, do you know of any work done on the ground above Hanging rock of any kind, except this survey that you speak of?
A. Not except the survey, no, sir.
Q. Oh, I see you signed the notice Holbrook trustee?
A. Yes, sir.
Q. Who was you trustee for?
A. L. L. Nunn.
Q. Did you have any directions to put up a notice?

A. I believe I did.
Q. From Mr. Nunn, I mean?
A. Yes, sir.

Redirect examination.

By Mr. BAILEY:

Q. What were those directions, Mr. Holbrook?
A. Sir?
Q. What directions did you have to put up a notice with reference to the fall of the stream?
A. Well, Mr. Nunn said that he sent down the surveyor for me to run a line, and to make a location at such point as we could get the greatest fall in the shortest distance.
Q. And was that notice placed near the head of the rapids?
A. Yes, sir.
Q. And how far did you say it was placed from the county bridge?
A. About 200 or 250 feet above it.
608 Q. Could it be seen readily?
A. Yes, sir.
Q. I see by that notice you claim the right to appropriate the waters of the Provo river by means of suitable dams, flumes and pipe line at or near that point?
A. Yes, sir.
Q. Did you mean when you placed that notice there to build a dam at that point?
A. No, sir.

Mr. HARKNESS: I think I will object to that, your honor, the notice will show.
The COURT: That is introduced in evidence, is it not?
Mr. HARKNESS: Yes.
Mr. BAILEY: I am asking in reference to his intention. I suppose they have introduced the notice to show that we proposed to build a dam at that point. We want to show the witness that he had no such intention to build a dam at that point.
Argued to the court.

Mr. BAILEY:

Q. I will ask witness if he intended at that time to build a dam at that point?
A. No, sir.
Q. Do you consider that any other point is more available for the purpose of building a dam?

Mr. HARKNESS: Object to that as immaterial, what he now considers.
The COURT: I think that is objectionable, Mr. Bailey, on redirect.
Mr. HENDERSON: If the court please, the question is asked not for the purpose of showing specifically what he now believes——
The COURT: I understood the question to be "do you believe."
Mr. HENDERSON: Yes, that was the question, but it was what he

thought then. I don't suppose the situation of Provo canyon has changed much since then, and it is, what is the best point in Provo canyon, and it applies now as well as it did then.

609 Argued to the court.

The COURT: I think the objection should be sustained.

Mr. HENDERSON: Give us an exception.

Mr. BAILEY:

Q. You understand, Mr. Holbrook, that subsequent investigations have showed that there is a more available place for a dam than the point at which you placed that notice?

A. How is that?

Mr. HARKNESS: I think I shall have to object to that, what he understands by subsequent investigations.

The COURT: Same ruling.

Mr. BAILEY: Give us an exception.

Q. Is there, Mr. Holbrook, a more available place for building a dam than the point at which you placed the notice?

A. Yes, sir.

Q. I will ask you now, what you now consider the most available point?

Mr. HARKNESS: Well, I object to that, he is not an expert.

The COURT: I think that is correct; he hasn't been introduced as an expert. Objection sustained.

Mr. BAILEY:

Q. You know the place known as Hanging rock, Mr. Holbrook?

A. Yes, sir.

Q. Do you understand that it was the ontention of the company to build a dam at that point?

A. Yes, sir.

Mr. HARKNESS: Well the court has ruled that it was admissible I would like to have that under my objection and exception.

The COURT: Yes, I think that is admissible.

Mr. BAILEY:

Q. Do you know, Mr. Holbrook, if any—I will ask you first, about how far is Hanging rock from the point where you put this notice?

A. Well, I should say about five or 6,000 feet; I don't know exactly.

Q. Above or below on the stream?

A. Above; it is above where the notice was placed.

610 Q. And how high above the point is it vertically, that is what is the rise in the river in that distance, do you know?

A. I do not know, no, sir.

Q. Do you know whether any rights intervene between the date of this notice, October, '94, and the fall of '95.

Mr. HARKNESS: That I object to.

The COURT: That assumes the form of a legal conclusion.

Mr. BAILEY:

Q. You had some conversation with Mr. Nunn in the fall of '94?
A. Yes, sir.
Q. After you had examined the river with him?
A. Yes, sir.
Q. Did he say anything at the time with reference to the volume of water in the river?
A. Yes, sir.
Q. State what that was?

Mr. WEDGWOOD: I object to that upon the same ground. Mr. Nunn has testified to that fact, and he is endeavoring to reinforce his testimony.

The COURT: Mr. Nunn has fully testified on that; testified what he directed and what his ideas were on that. I think that is the better testimony, the better evidence.

Mr. BAILEY: If your honor please, that is asked for the purpose of showing the necessity of some sort of storage, and for the purpose of showing that that was had in view from the very beginning.

The COURT: Nunn, has so testified.

Mr. BAILEY: Mr. Nunn has testified to that and I am asking Mr. Holbrook with reference to it.

The COURT: I think the objection should be sustained.

Mr. BAILEY: Exception.

Mr. HENDERSON:

Q. I want to ask a question or two; Mr. Holbrook, at the time you put that notice up that has been testified here; state whether at that time, with the view of developing power in that canyon,
611 you had made sufficient examination up there to determine and ascertain the particular place, point or manner of diverting the water?
A. Decidedly not.
Q. State whether the particular place of building a dam or diverting the water was determined after that time?
A. Yes, sir.

F. E. BAXTER, recalled for further cross-examination.

Examined by Mr. HENDERSON:

Q. Mr. Baxter, I show you the blue print of that strip of land in controversy, and ask you, calling your attention then to that, I want to ask you, taking that point, now where going up the stream where the railroad center, which you say is intended for the track of your company, where it enters upon this ground; I want to ask you if your profile map shows a cut or a fill there, and I show you the profile map?
A. It is nearly grade at that point.
Q. It is nearly grade?
A. Yes, sir.
Q. Now, tell, me, is it true that your railroad bed according to

the elevation at which you expect to build, at the grade that is laid down on your profile map, is approximately about six feet above the river?

A. At that point?

Q. Well, yes, at that point?

A. It is about thirteen feet above the surface of the water.

Q. Above the surface of the water?

A. Yes, sir.

Q. And does it maintain about the same thing right up there?

A. Well, up to South fork, at a point 500 feet down stream from South fork it is at an elevation of from ten to thirteen feet.

Q. Ten to thirteen feet? Now, that is above the surface of the water at high-water mark?

612 A. Well, this here, that is about — average height*h* of the water.

Q. An average?

A. Yes, sir; medium height*h*.

Q. And do you know anything about what the fluctuation is between average and high water?

A. It varies; I think it is from three to five feet, possibly six in places.

Q. Yes, well, then it is true that the scheme for your road-bed is about six feet above the high-water mark?

A. Yes.

Q. Yes.

A. Yes.

Q. It enters there about grade; now I want to ask you at some point where you enter there; now at that point on the northwest side of that land, the land towards the river, is it higher or lower at the end of the—end of it, from that center, than it is at the center?

A. It is lower.

Q. It is lower; it goes into the river?

A. Yes, sir.

Q. So that this 200 feet at that point extends into the bed, the bottom of the river?

A. Well, the map shows it to extend to the edge of the river. There is the edge of the river (indicating).

Q. It goes to the bed of the river?

A. Yes, sir.

Q. Now, how long following your grade map along there going up, how long does that grade continue as you state?

A. The rate of grade?

Q. Yes; where is that, point out that point to me?

A. That point is about 645 I think.

Q. About there?

A. Well, the extreme end of that land is 643; that is grade about right there; that is the extreme end.

Q. Right there?

A. This is what I referred to when I gave my first answer; I took the side of this 40-acre tract; that isn't the same as that (indicating).

Q. Now, going back to the extreme end of that strip——
A. The extreme end of that strip?
Q. Yes, and state to me what the grade is?
613 A. The rate of grade, or the height above the water?
Q. The height of the water, no, no, I mean whether there is a cut or fill.
A. About a six-foot fill.
Q. About a six-foot fill there?
A. Yes, sir.
Q. If you should build your road—in other words, according to the survey you have made, it would take about a six-foot fill there?
A. Yes, sir.
Q. And it is about thirteen, that would make it about thirteen feet above the face of the water at medium water?
A. Yes, sir.
Q. So that the ground as it now lays is only about six or seven feet above the surface of the water at medium water?
A. Yes, sir.
Q. And at high water the water now actually now flows on it?
A. Why, I think it does.
Q. Now that is speaking of the bed of your railroad, that is of the center line of the railroad?
A. Yes, sir, at that point.
Q. Yes; so that at high water now the water flows over it.

Mr. WEDGWOOD: He didn't say that.
Mr. HENDERSON: Well, I understood him to say.
Mr. WEDGWOOD: Flows the land as it exists now, is that your question?
Mr. HENDERSON: That is my question; flows the land as it exists now; that is true, isn't it, the high water?
A. Yes.
Q. Now, how far does that fill of six feet I think it was, you said six or seven?
A. Yes, sir; six feet.
Q. Going upstream now, how far does that grade continue?
A. That fill?
Q. That fill.
A. That fill runs out at the station about 63 feet from this point.
Q. Where is that station?
A. (Indicating.)
Q. It runs out there, and you would get——
A. Get into cut.
Q. You would get into cut there?
A. Yes, sir.
614 Q. And that point I will ask you again if the northwest side on the strip of land is lower or higher than the center line?
A. It is lower.
Q. It is lower that is at the point of the hill you would strike a fill or cut?

A. Strike a cut, yes, sir.

Q. Strike a cut, and how much cut is there there?

A. Well at that exact point it just runs to grade, but at the next end of it there is a cut there four feet down to two feet.

Q. That is the next end *if* it, upstream?

A. You would get grade right at that point.

Q. Yes, upstream?

A. To the left; four or five feet there.

Q. Yes, it runs on then going upstream how far at grade or within a foot or two of grade?

A. A hundred feet.

Q. About there?

A. Well, 200 feet it doesn't vary over three feet from grade 200 feet.

Q. Yes, and still the northwest side is still lower?

A. It is lower than the center line, yes, sir.

Q. Yes, it is lower than the center line; and about how much lower there?

A. Well, as I remember it, I think it is about on a grade with this low point down here; probably five or six feet or seven feet lower than the bottom of our grade.

Q. It is down below where high-water mark would flow the land?

A. Probably flow it.

Q. All along there?

A. Yes sir.,

Q. Up to that point as it now exists; now going on up from there then what is there?

A. Well the next thing that there is, there is a cut; the maximum cut is four feet; five feet in the next end of it there.

Q. That is just here?

A. Yes, sir.

Q. And now what is the character of the northwest side of the side line of the river?

A. Well, it is bottom land, lower.

615 Q. It is the bottom land?

A. Yes, sir.

Q. It runs down into the bottom to where the high-water mark of the river would flow it I suppose all along there?

A. Yes, sir.

Q. And then after going through that cut, what do you come to then?

A. Cut and a fill 250 feet long.

Q. 250 feet, how——

A. (Int.) About seven feet deep.

Q. How deep?

A. About seven feet deep.

Q. About seven feet deep; that then would be within about five feet of the high-water mark?

A. Well, of ordinary water so it shows here, within five or six feet.

Q. Yes, within five or six feet of——

A. (Int.) Ordinary water.
Q. That would be after your road is built?
A. No, the present ground.
Q. The present ground, yes, and then four or five feet up is plainly reached by the high-water mark?
A. Yes.
Q. So at that point right along the bed of the railroad as you have now laid it, it is where the high water of the river at the time flows it?
A. Yes, sir.
Q. And it flows the whole 200 feet at that point, doesn't it?
A. Well, I don't know; I don't think it flows the whole 200 feet, excepting possibly a very short distance.
Q. Yes, possibly a very short distance it would flow the 200 feet, but it does not flow the whole 100 feet of it, including the bed?
A. For a distance, yes.
Q. Well, for a hundred feet there?
A. Perhaps a hundred feet perhaps more; it isn't on an exact level. Here is the lowest point.
Q. Yes, I know, but for quite a distance there——
A. Yes, sir.
Q. At least that is so; and then running out of that what do you strike?
A. Strike a heavy cut a distance of 300 feet.
Q. Then what do you run on, or the road-bed now?
A. Road-bed, got a cut of 25 feet, extreme cut of 25 feet.
616 Q. It is only a point isn't it?
A. Well, it is nearly 300 feet long, running from the grade up to——
Q. (Int.) Well, that is 300 feet long running from nothing up to 25 feet?
A. Yes, sir.
Q. And down again?
A. Yes, sir.
Q. So that is a point, isn't it; your profile shows it, doesn't it?
A. Yes.
Q. And now what is the character of the northwest side at that point?
A. Well, it is down in the bottom, in the low lands.
Q. Yes, in the low lands; it is where it would be overflowed by high water?
A. Yes, sir.
Q. I mean as it exists now?
A. To the edge of the right of way would be flooded.
Q. Yes; it would be flooded by high water as it now stands; now passing through that cut what do you come to?
A. Get into a fill for a distance of about 400 feet; the fill varies from five to eight or nine feet in depth.
Q. Five or eight or nine feet in depth?
A. Yes, sir.
Q. Well then, at that point — the fill, the fill is from the surface of the water up isn't it almost?

A. Nearly.

Q. Within a foot or two?

A. Yes, sir.

Q. It is true at that point the surface of the water at even medium water covers the land as it now exists, doesn't it?

A. No, sir; doesn't cover it as it exists.

Q. Well, it would be within how much of it?

A. Within two or three feet.

Q. Within two or three feet; slight high water will cover it, won't it?

A. Yes.

Q. And that is the center of your 200 feet, and where the road-bed would be laid, that is true, isn't it?

A. Yes.

Q. And the entire distance of surface from the center up
617 to the northwest side is in the same condition?

A. Yes, sir.

Q. And it extends clear up to the southeast side, don't it, at that point?

A. The low lands; no, sir; that is a side hill right there.

Q. I say it is a side hill; the west side of your 200 feet there would run up on the hill?

A. The southeast side; yes.

Q. But for more than half of the distance of the 200 feet high water at the present time covers the land, don't it?

A. For a distance; yes.

Q. Yes, for a distance; that cut extends there, as you say, about 400 feet?

A. 450 feet.

Q. And varies from——

A. Eight or nine feet up to grade.

Q. Eight or nine feet up to grade; now passing from that point on up the stream what next do you come to after that?

A. A cut about 175 feet long and eight feet deep.

Q. Eight feet deep?

A. At its maximum summit, yes, sir.

Q. Yes, at its summit, and from that down to grade?

A. Yes, sir.

Q. And there the northwest side of your 200-feet line comes down to the low lands the same?

A. Yes, sir.

Q. And then what do you come to?

A. A fill about 300 feet long.

Q. A fill about 400 feet long, and how deep?

A. Eight or nine feet.

Q. Eight or nine feet; well, there you would come down to within a foot or two of the water line, wouldn't you?

A. Yes, sir.

Q. At ordinary——

A. At ordinary water, yes.

Q. And slight high water in the present condition actually flows the land at the center of the 200 feet, don't it?

A. Yes, sir.

Q. At that point and flows all along there, the extreme—

618 well, there it strikes into the river, don't it, the northwest side?

A. The side of the right of way does, yes, sir, runs into the river.

Q. Yes, it runs into the river, extends nearly to the opposite bank, don't it?

A. Yes, sir.

Q. So that there the land comes down to actual surface of the water, don't it?

A. Yes, sir.

Q. At whatever height it may be; if there is anything running in the stream at all that is true?

A. Part of the line is in the river.

Q. Part of the line is in the river; now passing on how long is that fill there?

A. That fill is nearly 300 feet long.

Q. And then what do you come to?

A. A cut 125 feet long and 17 feet deep.

Q. Is that it?

A. That is it, yes, sir.

Q. That is the point again?

A. That is a hillside; where it runs into the hillside.

Q. Runs into the hillside, and there at that point the line is, the southwest line is still in the river, isn't it?

A. Yes, sir.

Q. And then passing on from there——

The Court: You mean the southwest line, Judge?

Mr. Henderson: The southwest line, no, the northwest line.

A. Northwest line.

Q. I mean, well, the one next to the river?

A. The line next to the river. A. And then there is a fill 475 feet in length.

Q. Which is that?

A. Right there.

Q. And then there is a fill 475 feet, and what is the maximum fill?

A. Sixteen feet.

Q. Sixteen feet, well, you actually—then there you go down to below any water line that you know anything about, don't you?

619 A. Go to the bottom of a branch of the river.

Q. Yes, go to the bottom of a branch of the river; well, you haven't got to the south branch, have you?

A. No, not the South fork, no; here it is right here.

Q. It there actuall- runs into the river, don't it?

A. Yes, runs into the river.

Q. The line runs into the river?

A. It is a branch of the river there.

Q. What?

A. It is a branch of the river there; there is another part comes up around here (indicating) that is the high land in here.

Q. Exactly, and it runs across there and just touches a little point of the high land in that branch?

A. Yes, sir; just touches a small part of the high land.

Q. And there the inside line, the one next to the river at places takes in that whole branch of the river, don't it?

A. Yes, sir.

Q. So at that point the line of your present road-bed and your entire line from the road-bed to the river, or to the side of your line next to the river is covered by the water of the river, isn't it?

A. Yes, sir.

Q. And any fluctuation effects it there, would raise it and lower it, wouldn't it?

A. Yes, sir.

Q. Now, at that point what do you tell me your grade is above the mean level of the river?

A. About eleven feet.

Q. About eleven feet at that point?

A. Yes.

Q. What line there indicates the river; the blue line or the blue dotted line?

A. The blue dotted line is where—the solid blue line on the profile represents the water line as actually taken with an instrument, and the dotted line represents probable grade between.

Q. And what season of the year was that?

A. I think that was done in August.

620 Q. In August?

A. These was the notes that was made possibly later (indicating).

Q. This was just average water?

A. Yes.

Q. Now passing on to that (indicating) you come to a cut, do you not?

A. Yes, sir.

Q. And how much?

A. About 50 feet, rock cut.

Q. Yes, it is 50 feet on the upper hillside?

A. No, that is the center line.

Q. That is the center line?

A. That is the center line.

Q. That is a sharp point there?

A. A sharp rock point.

Q. And how far does that extend?

A. The bottom of the cut is 140 feet long.

Q. 140 feet long?

A. Along the center line.

Q. And then you come to another fill?

A. Come to quite a long fill, fill for 1900 feet.

Q. Fill for 1900 feet; now which point is that?
A. That is between here and here (indicating).
Q. Yes, between those two points is a long fill of 1900 feet?
A. That is across the valley of the South fork.
Q. That is across the valley; show me on there where you cross the river?
A. (Indicating.)
Q. And in that you twice cross the river, don't you, the center line, that is as the river is now?
A. Yes, sir.
Q. Well, the center line?
A. Yes, sir; across the river as the river now is.
Q. Well, not only your center line, but your whole line?
A. The right of way, yes.
Q. That is the whole line across, runs through the low land between?
A. Yes, sir.
Q. And cross there how many times according to the present condition of the land does it go to actual water level as shown on your map as taken at mean water level?
621 A. Well, it goes to the water level twice, and then goes through the water, a small slough at the foot of this rock. I don't know whether that is on a level with the river or not.
Q. Well, isn't that a place where it goes to it?
A. Well, probably within a foot of it there; doesn't actually go to it.
Q. Now, across that entire flat there there is an average grade?
A. The height of the present ground, you mean?
Q. Of the present ground, yes?
A. Above the water.
Q. Yes?
A. It would average perhaps four feet and runs from one or two to four or five feet.
Q. During high water the entire strip in there is covered with water, isn't it?
A. I hardly think it is; because that is quite wide there, and I don't think that high-water mark would be as much above the ordinary stage at that point as it would in other places.
Q. Well, it would cover most of it?
A. Yes.
Q. Yes, it would cover most of it as it now exists?

—. ———

A. That includes the whole entire 200 feet, don't it?
A. It would probably cover the whole 200 feet in places.
Q. Now, passing above that and on up the stream, after crossing the river, what do you come to then?
A. The line then goes on a steep hillside, quite a steep hillside, 800 feet, mostly in cut, with two light fills in that distance.
Q. And then passing from there?
A. There is a fill of 350 feet long and perhaps six feet deep.
Q. 350 feet?

A. Yes.

Q. Well, would that scale change up there?

A. No, sir; that represents three hundred feet; there is one, two, three and there is a half more.

Q. Well then you have run way up on the hillside there?

A. No, sir; there is a fill there.

622 Q. Well, how much of a fill is there?

A. From five to seven feet, six or seven.

Q. You was speaking of the distance?

A. Yes, I was speaking of the horizontal distance.

Q. Horizontal distance, yes, I see; that takes it down so that the present fork of the ground there is what?

A. Within about three and a half feet of the ordinary water surface.

Q. And will you show me where that is on this map?

A. Well, that is just off the Ferguson land. The Ferguson land ends just here at station 690.

Q. So that you have gone through that?

A. I have gone through that.

Q. Now, Mr. Baxter, then it is true that some distance through this land the 200 feet is at present at the water level, isn't it?

A. Where it crosses the river, yes, sir.

Q. Where it crosses the river, and there are two or three other places there, isn't there where it goes down to water level?

A. Not where the whole 200 feet goes down to water.

Q. No, possibly not where the 200 feet goes down to water; almost the entire line next to the river—I will change that; a large proportion of the line next to the river of that 200 feet is in or across the river, isn't it?

A. A large proportion of what?

Q. Of the line next to the river, and I mean by the line next to the river, the end of it next to the river?

A. That side of the right of way?

Q. Yes.

A. Yes, sir.

Q. Yes, and *a* quite a large proportion as it now lays at the center of that line is flooded with ordinary high water at the present time?

A. I wouldn't call it—yes, quite a large proportion.

Q. Yes, quite a large proportion is at the present time flooded?

623 A. Yes, sir.

Q. And nearly the whole distance of the inside line is flooded by ordinary high water, ain't it?

A. Of what do you call the inside line?

Q. I mean the inside line, that next to the river of the 200 feet?

A. Yes, sir; mostly.

Q. That is as the land exists today?

A. Yes, sir.

Q. And since you and I knew it?

A. Yes.

Q. And can you tell me, does your map there show the grade of the river surface, the water surface, approximately?

A. In places it shows that exactly and other places it shows the approximate water surface.

Q. Just give me the places where it shows it exactly?

A. It is on the Ferguson property.

Q. Well, that is, if you have such a place?

A. At both the crossings of the river at the South fork, near the South fork in two places.

Q. Now, tell me what the difference is?

A. The difference in elevation at those two points is about two and a half feet in elevation in a horizontal distance of 1,200 feet.

Q. Well, horizontal distance, is that angle?

A. Measured in a straight line.

Q. Well,—I see, measured in a straight line, and that is only the difference between them; and the angle line of the river——

A. (Int.) That is the river would be longer than that between those two points.

Q. Yes, considerably longer; now, Mr. Baxter, tell me if what you are reading from is simply from the lines as you have drawn them on the map, or have got the actual figures noted on there that were taken of this elevation?

A. I haven't the actual figures.

Q. No, that is what I supposed, and it isn't possible, is it to
624 read the lines on that map absolutely correct?

A. No, sir; we can read them within probably a half a foot approximately.

Q. It is an approximate reading?

A. Yes, sir.

Q. And is made for the purpose of giving an approximate statement of it by looking at it?

A. Yes, sir.

Q. But the most exact figures are not there; you haven't got the exact figures, have you there?

A. Of the water surface?

Q. Of the water surface?

A. I think they can be found in the notes; I know they can.

Q. Well, I didn't know whether you could do that right now?

A. No, sir; it will take some time to look that up.

Q. And as you read the notes what do you say the difference was?

A. About two and a half feet.

Q. About two and a half feet; what would you say from reading that the difference is between the place where the line enters the Ferguson land and goes out of it?

A. About fifteen feet.

Q About fifteen feet?

A. Yes, sir.

Q. Of fall?

A. Yes, sir.

Q. In the Ferguson land?

A. Yes, sir; that is from station 643 to station 692.

Q. And how long is the Ferguson land?

A. Well, that is nearly a mile between those stations by our line, about a mile.

Q. Let's see, how long is that?

A. The distance that I have used here is 4,900 feet.

Q. Entirely through the Ferguson land?

A. That is practically through it, yes, sir, within a hundred feet or so.

Q. Why, I thought it was the whole length of a section?

A. Well, I have taken it from 643 to 692; if that isn't right I want to correct it.

Q. It is four forty-s isn't it, lying side by side?

A. No, I think not.

625 Mr. WEDGWOOD: There is a jog?

Mr. HARKNESS: 4,550 feet has been testified here.

A. Well, then, I have got a gr-ater distance than the actual distance through it.

Mr. HENDERSON:

Q. Now, what did you state—I think you stated here the other day, my recollection is that I asked you what the grade was on the road-bed?

A. Yes, sir; I testified to that.

Q. And through there what did you state the general grade was?

A. Well, I stated it in detail on the lower portion of the Ferguson place for the first about 2,000 or 2,500 feet, that the grade is one-tenth of one per cent.

Q. Yes.

A. And for the balance of the distance——

Q. That would be one foot in how far?

A. One foot in a thousand.

Q. One foot in a thousand; and for the rest of the distance?

A. It is a little more than one-third of one per cent., $\frac{37}{100}$ths of one per cent.

Q. Let's see, that is a little more——

A. That would be three and $\frac{7}{10}$ths feet in a thousand.

Q. Exactly; about what would the average be through the land—oh, approximately, I don't care for close figures.

A. It would be two feet in a thousand.

Q. About two feet in a thousand, would make a difference of, if there is a little less than 5,000 feet, it would be a difference of about ten feet?

A. Well, it would be more than two feet in a thousand; well, that is—yes, sir, I am speaking of the railroad grade, not what I gave you as the water grade; there would be some difference in those.

Q. Yes, I know, you ran your road nearer the water level as you got up?

A. Yes, sir; it is some closer to the water surface as you go up.

626 Q. That is to say, you didn't run on a grade that is equal to the bed of the river?

A. Not exactly parallel to the bed of the river.

Q. As you go up you are gradually approaching the water of the river?

A. Yes, sir; through there.

Q. Yes, so that it would be somewhere from, according to that figuring, somewhere from eleven or 12 to 15 feet?

A. In figuring about eleven feet at the upper end of the Ferguson ground, that is between the grade and the ordinary stage of water.

Q. That is eleven feet, and down at the lower end it is how much?

A. About fourteen.

Q. About fourteen; you have approached three feet nearer the water up there?

A. Yes, sir.

Redirect examination.

By Mr. WEDGWOOD:

Q. I want to ask you one question, Mr. Baxter. I don't know but what I am thick-headed, but either I don't understand the question or else I don't understand the answer you gave to Judge Henderson's question. Now, Mr. Baxter, you stated, if I remember right that when you spoke of the water that it was its ordinary level, the level of the water was at its ordinary level?

A. Yes.

Q. Now, what do you mean by ordinary level?

A. Well, it was the same level, or it was the level that actually was at the time this profile was made.

Q. Well, when you speak of ordinary water, do you mean about half way between high and low water?

A. Might not be just half way.

Q. Well, it would be between them?

A. Yes, it would be between them.

627 Q. Now, I think you stated that where the right of way over the Ferguson land, that the actual elevation of the ground as it is now was six feet?

A. Above the river.

Q. Above the level of the river as taken?

A. Yes, sir.

Q. Then Judge Henderson stated to you, in high water that that piece of ground as it stands now would be on a level with the river?

A. It might be.

Q. You said yes?

A. Yes, sir.

Q. Now, what I want to get at is, it might be and might not be; if six feet was the extreme high water, and in order to have it equal with that this would have to be an extreme low water, wouldn't it?

A. Yes, sir.

Q. So figuring on that basis, you would be figuring that as extreme low water?

A. Yes, sir.

Q. So, if what you take there was the medium water, and we will say it was half way between high and low water at that time, at extreme high water, that point would be three feet above the water would it not?

A. Yes, sir; figuring on that basis.

Q. And if extreme low water was two feet below that why then it would be two feet above?

A. Yes, sir, with a variation of six feet.

Q. With a variation of six feet; so with that fill there of six feet the road-bed as built would be somewhere from eight or nine feet above the extreme high water; if that is about average water?

Mr. HENDERSON: What road-bed do you mean as built?

Mr. WEDGWOOD: If built, according to that?

A. Yes, sir.

Q. So there would in fact be as the grade of the profile now shows to the best of your judgment somewhere eight or nine feet above extreme high water at that point?

A. Yes, sir.

Q. And that would be true relative to all these different positions that you have been asked about by Judge Henderson?

A. Yes, it would.

628 Recross-examination.

By Judge HENDERSON:

Q. Now, Mr. Baxter, let's see if you have stated what you want to state; do you mean to say that river will go below what it was when you measured it as much as it ever raised above what it was when you measured it?

A. I don't think so.

Q. No, of course not.

A. I don't think that.

Q. It was nearer low-water mark than it was high-water mark wasn't it?

A. I think it was, somewhat.

Q. In other words, it was the mean average flow in the summer time when you measured it, wasn't it?

A. I think probably it was.

Q. Yes, it wasn't very extremely high or extremely low water when you measured it?

A. No, sir.

Q. It was just the average summer flow, nothing else; you have seen that river when it was very high, haven't you?

A. Yes, sir.

Q. And at that *time*, it would be very much higher above the level at which you took it than the depth of the stream was at all when you did take it, wasn't it?

A. Well, — depend on -hat the depth is; in *some* places the depth

is gr-ater than the raise would be for instance at Hanging rock, the depth is much greater at that point than the rise would be.

Q. Yes, that is where there is a deep place, but take it at places where it is running along over gravel bottom?

A. I don't think the high water would be much above that—I have got depths here of seven feet, and I don't think the high water would rise seven feet.

Q. What is the average depth; I am talking about the maximum depth: is there anything on here that——

A. (Int.) Yes there is; now there is one depth here (indicating) the very shallowest depth two feet, and another place it is
629 eight feet and another place it is seven feet, and another place it is four feet, and another place it is nearly ten; that is at Hanging rock.

Q. There are raises and depressions in the bottom?

A. Yes, sir.

Q. Where it is washed out, and also places where it isn't but two or three feet deep?

A. Yes.

Q. Now, you have answered me with respect to the particular point where this enters upon this land, and there you say that the present land as it is without the fill—I believe it is fill isn't it?

A. Yes, sir.

Q. Where you enter upon it, as you say; how much is the fill?

A. Eight or nine feet.

Q. The fill is eight or nine feet?

A. Yes, sir.

Q. Taking it down—making the present surface of the ground how much above the water as you measure it?

A. Between five and six feet.

Q. Yes, five or six.

A. Five or six.

Q. How much was the fill there?

A. I am speaking now of the highest surface of the ground above the water line, shown on this profile.

Q. Yes, I say——

A. That is five or six feet.

Q. Five or six; well now, which is it? Can't you tell nearer than that?

A. I would call it six feet.

Q. You would call it six feet?

A. Yes, sir; that is at station 643 plus 40, which is the exact station in there.

Q. Now, at that place you would say then, wouldn't you, that in extreme high water it would reach that place as it is now.

A. I don't think it would.

Q. Don't think it would at all?

A. Well it would come very close to it; come within a few feet of it probably.

Q. If it was graded; now, you are speaking of the center?

630 Q. It descends all the way towards the stream, don't it?

A. I don't know; that lowest point may be the level of the valley, the ground may not run any lower than that same place. My line runs right down into the bottom and continues that way all the way to the river.

Q. Can't you tell me here?

A. I don't think I can; I don't think there is enough details shown on that map.

Q. Well, right there, ain't that the point where the 200-feet line goes down beyond the river bank?

A. Yes, as to that, but I was talking about the center line.

Q. Well, I mean going from the center line down towards the river it decreases all the time don't it, it is on a descent?

A. Not all the way, there is a bottom in there covered with brush; the bottom is about level, being about as high near the edge of the water as it is near the edge of the hill.

Q. Now, do you say that running clear down that hill one hundred feet from the center of your line there isn't any descent to the river?

Mr. WEDGWOOD: If the court please, he has gone over that. I have not re-examined him on that at all.

Mr. HENDERSON: That is the very point he examined about, its flowing this.

The COURT: Didn't you examine him on that?

Mr. WEDGWOOD: I don't care; to save time; I didn't examine him on that question at all.

Mr. HENDERSON: Well is it objected to?

Mr. WEDGWOOD: Yes, it is objected to taking up time here.

The COURT: Answer the question.

A. Please read the question.

Mr. HENDERSON:

Q. Do you say that it don't—on that line there where it enters this land, on the bottom there, didn't descend towards the
631 river?

A. I can't say whether it does or not.

Q. You can't say whether it does or not; well, then, if it does descend there, high-water mark—if it did descend very much high-water mark would flood it?

A. Yes, sir; if it descends very much.

Q. How far would a grade such as you have put in there, would the footing of that grade run out on that land, suppose it was filled in there with dirt?

A. Run out 19 feet, or 14 feet—run out 19 feet out from the center line.

Q. Yes, it would run 19 feet out from the center line, substantially twenty feet?

A. Yes, sir.

Q. It would only be 80 feet from that into the river, would it?

A. About 80 feet.

Q. Now, do you say in your judgment that the extreme high water of the river don't flow that?

A. You mean it would flow that fill as made?

Q. That fill?

A. I can't say definitely, I don't think it would.

Q. Well, you don't think it would?

A. No, sir.

Q. Why don't you think it would?

A. Because we have got two or three feet to go on here; and I don't think there is much fall from the center line out on to that point.

Q. Two or three feet; how do you get your two or three feet?

A. Well, I have testified that I thought the high-water mark would reach within two or three feet of that point.

Q. Within two or three feet of that point?

A. Yes, sir.

Q. How much do you think it would vary between the point, you would take it, and the high-water mark, and the extreme high-water mark?

A. I don't think it would be to exceed three or four feet higher; four feet possibly at that point.

632 Q. Did you testify in answer to my question that it would be five or six feet?

A. I think I said extremely high water.

Q. That is what I am asking you, I said extreme high water.

A. From low water?

Q. From the line as you would take it?

Mr. WEDGWOOD: No, sir; he didn't say that.

A. No, sir; I didn't say that.

Mr. HENDERSON:

Q. You didn't say that?

A. I don't think so.

Q. You didn't say you thought it would raise above that line five or six feet in extreme high water?

A. No, sir.

Q. Now, if you did say that, what do you say, was it a mistake, or was it your judgment?

A. Well, it was a mistake.

Q. It was a mistake?

A. Meaning that it was from low water to high water, a variation.

Q. From low water?

A. Yes, sir.

Q. Then, according to that you would have it that the line that you was running was some two feet above low water; mean to say that?

A. Why, I didn't say that it would be anywhere from six feet from low water to high water; it would be probably five feet in places; probably four feet in places, and I am not prepared to say

that this water level is two feet above extreme high — low water at all places.

Q. At all places?

A. No, sir.

Q. Did I ask you about it at any other place than over the Ferguson land?

A. No, sir.

Q. No, would it vary two or three feet in the distance through the Ferguson land?

A. No, it would not vary that much, I don't think.

Q. No; it would not vary that much; well now, you are not prepared to say then are you whether the extreme high water would actually touch this embankment that you would put on there?

633 A. Well, I can't say definitely whether it would or not.

Q. Can't say definitely?

A. No, sir.

Q. It would depend upon how that bank descends towards the river?

A. Yes, sir.

Q. Now, about that—just run hastily over that, there isn't very many places a great many places through that land there where the grade is closer to the water than it is at the place where you enter?

A. Yes, sir.

Q. And that is the point right there?

A. Yes, sir; that is the point right there.

Q. That point is higher than it is all the way north there, a long flat where you cross the river, isn't it?

A. Yes, sir.

Q. Yes, sir; and that flat where you cross the river at places down there must be within a foot of the line of the water as you measured it, isn't —?

A. Yes, sir; one place there.

Q. Now, do you want to change your statement that you made to me that ordinary high water covers that railroad track all the way over that flat from where you cross the river at one time to where you cross it again?

A. It don't cover the railroad track.

Q. What is it?

A. It don't cover the railroad track.

Q. Well, you know what I mean?

Mr. WEDGWOOD: Well, it is very misleading, Judge, even to me.

Mr. HENDERSON: Well, if it is, then it is very misleading.

Q. What do you mean by the railroad track?

A. I mean the railroad track

Q. As it is built?

A. Yes, sir; as it is built.

Q. Do you know any railroad track that is built there?

A. No, sir.

Q. Ever seen any?

A. No track built, no sir.
Q. There is no track built. Did you answer?
A. No, sir.

634 Q. Now, you don't know very well, when I speak of the railroad track along there, I mean the railroad grade, as it is laid out there?

A. You mean the present surface of the ground that the railroad is to be built on?
Q. Yes the present surface of the ground?
A. Yes, sir; there would be some of it flooded.
Q. Yes, sir; the most of it would be flooded all through there?
A. No, sir; I don't think the most of it.
Q. You don't think the most of it; you point me out the places there that you don't think would be?
A. Well, there is three or 400 feet here on the hillside.
Q. Well, but where is the place?
A. Here is the beginning of the Ferguson——
Q. Well, but I am speaking of across this?
A. Well, there is one, 2 and 3, well, there is at least 900 feet in that that I don't think would be flooded—it is 500 feet approximately.
Q. Where the center line would be flooded?
A. Well, the side is just as high as the center; that is perfectly level.
Q. A half of it then would be flooded?
A. Half of it probably.
Q. And extreme high water might flood the whole of it?
A. I don't think so.
Q. Did you tell me so before whe- I asked you?
A. I don't think so.
Q. You don't think so; didn't you tell me within the last thirty minutes, when I asked you, one of the last questions that I asked you if it wasn't true that in extreme high water it might be flooded, the whole length in there, and didn't you think it would from side to side, that is over the extreme 200 feet wide, but you thought that it might be the whole length over there?
A. I think I answered in regard to some other ground.

635 That's all.

Mr. WEDGWOOD:

Q. Say, Mr. Baxter, just one question, I wish you would tell me how much you answered to Judge Henderson that the fill was as laid down on the profile where it entered the Ferguson land, I am not sure that I remember?
A. The fill where it enters the point at the Ferguson land is eight feet.
Q. Eight feet; that's all.

W. B. SEARLE, recalled for defendants.

Examined by Mr. HENDERSON:

Q. Mr. Searle, you took some levels along up there of the levels of the water, have you not, at some time?

A. From Hanging rock up Provo river, yes, sir.

Q. Yes, from Hanging rock up Provo river; well, it commenced did it not, you took it also at Middle rock, didn't you?

A. Yes, sir.

Q. Well, I will commence at Middle rock. I think you stated what the difference in altitude of the surface of the water between the water at Hanging rock and Middle rock is, two and $\frac{3}{10}$ths feet, is that right?

A. Yes, sir—two and $\frac{3}{10}$ths.

Q. $2\frac{3}{10}$ths; now, from Hanging rock up the river, at what point did you measure, or have you got——?

A. The next points I took were near the South fork.

Q. Near the South fork?

A. Yes, sir.

Q. And what is the difference between those?

Mr. WEDGWOOD: Well, which one, between Middle rock or Hanging rock?

Mr. HENDERSON:

Q. Well, between Hanging rock and South fork?

A. There was eight feet difference there to a point about
636 400 feet below the entrance to the South fork—300 feet below the entrance to the South fork, and the river raises very rapidly for, in the next 600 feet, six or 700 feet, to about five feet difference in elevation there.

Q. Now, did you take any of these places between there, between the South fork and Hanging rock?

A. No, sir.

Q. What would you say as a matter of judgment as to whether between those two points, Hanging rock and South fork where you took it, as to whether the fall is about equally proportionate over the distance?

A. That is my judgment exactly; that's the reason I didn't take any of the points between.

Q. Yes, now have you examined the land up there lately?

A. Yes, sir.

Q. When was you there last?

A. Yesterday?

Q. You was there yesterday last? You know in a general way along where this line is laid out on this blue print, do you?

A. I followed it over a part of the distance there.

Q. Followed it a part of the distance?

A. Yes, sir.

Q. Over there, and the center line?

A. Yes, sir.

Q. Was you able to find all of it?

A. I was able to find the tangents, the straight portion.

Q. What do you mean by the tangents, what is the tangent?

A. It is the usual term that is applied to that portion of the railroad track which is straight.

Q. You could find this; could you find the curves?

A. No, sir.

Q. Couldn't find the curves; now I want to ask you if you have made any figuring on what the effect would be of how far the water would set back with a dam at Hanging rock 25 feet high?

A. Yes, sir.

Q. Now, just give us the result of that, how much, how far would it set back, to what point?

637 A. It would set back 5,200 feet.

Q. How far above the Ferguson land?

A. Excuse me; I made a misstatement there.

Q. Yes.

A. I took that from notation of the railroad grade line; it would flow the railroad grade line that far back. It would flow the river 8,800 feet back.

Mr. WEDGWOOD: 8,800?

A. Yes, sir.

Mr. HENDERSON:

Q. Would flow the railroad grade line how far back?

A. 5,200 feet. I just simply took that from their profile.

Q. And that is from the point where the railroad as surveyed would pass Hanging rock, from that point up it would flow it?

A. Yes, sir.

Q. And now, do you mean that it would flow the track as it is laid out to be built?

A. Yes, sir.

Q. If when completed it would flow the entire track that length of distance?

A. Yes, sir.

Q. Now, I want to ask you, take the condition of the ground as it is along there, and how much of that land would such a dam flow?

A. Oh, it would flow seventy per cent. of that.

Q. Seventy per cent. of the 200 feet all the way up to above the Ferguson land, do you mean?

A. Yes, sir.

Q. What would, and how far back does the present retaining dam or diverting dam that they have put in there, that little diverting dam that they turn the stream with now; how far back does that set water, do you know?

A. It flows the water back onto the Ferguson land.

Q. It flows water back onto the Ferguson land?

A. Yes, sir.

Q. And its effects are felt, and its slack water from that dam clear back upon to the Ferguson land?

A. Yes, sir.

Q. As it now is?

A. Yes, sir.

638 Q. With the little retaining dam that is down below?

A. Yes, sir.

Mr. WEDGWOOD: I suppose of course this testimony in regard to the 25-foot dam comes in under the same objection that was argued the other day.

The COURT: The same objection.

Cross-examination.

Mr. WEDGWOOD:

Q. Mr. Searle, it was stated here that you had the notes establishing water level, from which that data has been made; have you got them, or I will ask you this question, Mr. Searle, is this a calculation that was made some time ago or is it a calculation that you made yesterday?

A. Which portion of it?

Q. What a dam 25 feet high at Hanging rock would flow?

A. That was made some time ago.

Q. Made some time ago?

A. Yes, sir; you will find the notations on the map which was introduced here, and those notations were made before this case was brought.

Q. Well, you have given the difference between the grades at these points; now, what was the grade of one of these points that is, you take it from sea level, don't you, you start from that don't you, so that you can determine or anybody else can determine if given your figures and your notes, just where that grade is, just where that point is, the physical fact?

A. Yes, sir.

Q. Well, give some of them?

A. Oh, they are not taken from the sea level, but they are taken from an assumed elevation above sea level.

Q. Well, assume some point——

A. Which surveyors understand, yes, sir.

Q. Well, give us one of these, you started from Middle rock,

639 didn't you?

A. Middle rock on my date was 5,183.

Mr. HARKNESS: I would like to ask him just a question: I understand that from Middle rock up to Hanging rock you made a fall in the river of two and $\frac{3}{10}$ths feet?

A. Yes, sir.

Q. Have you the means there of giving it quickly how much fall there is from Middle rock down to your diverting dam?

A. Yes, sir.

Q. How much is that?

A. Nearly six feet.

Q. When you speak of a dam of 25 feet high, what is the basis, what do you assume the 25 feet from, Mr. Searle?

A. Water level at Hanging rock.

Q. What?

A. Water level at Hanging rock.

Q. Well, what water level; from a point two feet and three-tenths above the position that I have given you at Middle rock, or an elevation in my levels of $5{,}185\frac{3}{10}$ths feet?

—. ——.

Q. Well, now, can you say, that is what I have been trying to get at all through the case, can you say whether—that point you take is simply an arbitrary one, whether it is a low-water mark or medium or high water?

A. It is a point between low and high water.

Q. Simply an arbitrary point?

A. A point that was taken there at the time these elevations were started.

Q. At the time these elevations were taken, was that point the then water level of the river?

A. Yes.

Q. What?

A. Yes.

Q. What time of the year was that?

A. That was in April.

Q. What year?

A. '06.

Q. Was the water then at the medium flow, or more or less?

A. I judge about medium.

Q. Then when you speak of a dam at Hanging rock, you mean 25 feet high at that place above the medium flow at that time?

A. Yes.

Q. Can you give me an estimate there if you have it what
640 acreage that that dam would flow in the canyon?

A. I have it not here, but I testified before to about sixty acres.

Q. Do you know about what acreage your diverting dam flows?

A. No, I can tell you pretty close.

Q. Well, approximately; I don't care to an acre?

A. Oh, about six to eight acres.

Q. How much?

A. Six to eight acres.

Q. How high is that?

A. Above the surface of the water?

Q. Above that same point, the surface taken at the time you refer to?

A. Let me understand, Judge, which data you want me to give about.

Q. Well, I would like to have you take the height of the dam above that same state of water that you referred to with reference to the 25-foot dam?

A. The height of the dam is, of this present diverting dam is one and a half feet above that; but it raises the water in ordinary stages nearly three, not quite, about between two and a half and three, I don't remember exactly.

Q. I don't believe I got the point; the height of the dam is how

many feet you say above the medium flow of the water at the point of the diverting dam, I don't mean up at Hanging rock?

A. Oh!

Q. You could subtract right back and get it?

A. Yes.

Q. Well, just subtract right back and get it, or add?

A. You want it above the water at the height of the dam?

Q. Yes, the height of the dam above water there, take the same average water?

A. Very close to nine feet and a half.

Q. Very close to nine feet and a half above the water?

A. Yes, it raises the water nearly eleven.

Q. Could you without going into any figures, just give a rough estimate of how much that diverting dam would flow, if it was raised four feet higher than it is?

A. How much land it would cover?

641 Q. Yes?

A. No, I could not.

Q. You answered Judge Henderson that the diverting dam now flows the Ferguson land, as I understand, I understood you *you* mean this 200 feet wide on the Ferguson land that is marked off for railroad?

A. A part of it.

Q. What?

A. A part of it.

Q. A part of it, would it flow it if it was raised to grade, graduated to the grade the survey is intended for grading to the profile?

Mr. HENDERSON: Just a moment; I didn't understand the question.

Mr. HARKNESS: As the land now is upon the ground, the diverting dam flows part of it.

Mr. HENDERSON: Yes.

Mr. HARKNESS:

Q. I ask him if according to that profile the road was built and graduated according to that whether it would flow the road?

Mr. HENDERSON: Oh, no.

A. No, sir.

Mr. HARKNESS:

Q. About how much would it lack of that?

A. How was that?

Q. Can you give a rough estimate of how much the road would be above it?

A. I think seven or eight feet; I may be mistaken about that; I didn't notice it particularly.

Mr. HENDERSON:

Q. Well, it would be above it; I will concede that it would be above it?

Mr. WEDGWOOD:

Q. I will just ask one question, Mr. Searle, you say you took this grade, or height of the water at Middle rock from an imaginary line or point; you know the line of elevation which railroad engineers use all over the country?

A. Yes, I know that.

Q. It is usual to carry railroad elevations completely through?

A. As I done that; I made the one starting point in the canyon there from which nearly all my work was done; which I assumed was nearly 5,200 feet high. I find from the railroad survey
642 that it was nearly ten feet higher. I had taken that from the barometer and that varies——

Q. That is to the best of your judgment there is ten feet difference between the line as used by the railroad men and the line which you took?

A. Yes, sir.

Q. Now, can you tell me whether it was ten feet higher or lower?

A. Yes, sir.

Q. Yes; which is it?

A. I am ten feet higher.

Q. You are ten feet higher?

A. But my difference in elevation from point to point will check with theirs.

Q. Yes, would?

A. It will.

Q. It will; then as a matter of fact your elevations work check with the profile of the railroad?

A. As far as I have been over it,——

Q. As far as you have been over it?

A. The difference from point to point is exactly the same.

Mr. HENDERSON:

Q. Now, Mr. Searles, you say that you started with an elevation of a certain amount from sea level; now does it make any difference what that is?

A. No, sir.

Q. When you want to simply show the difference in altitude between two particular points?

A. Not in the least.

Q. And that is all that you wanted to do?

A. Not in the least; I may have been a thousand or 10,000 feet off from the actual elevation.

Q. Supposing you had disregarded that entirely and started at zero without any elevation at all except to fix in your own arbitrarily the place where you commenced, and called that aught?

A. The result would have been the same.

Q. And when you got up and measured at the other places you found that the difference is two feet and five-tenths, as *at* you
643 did at Hanging rock and Middle rock, whether that would show the difference just as well as if you commenced at what you call sea level?

A. Exactly.

Q. So that for the work you did, it was immaterial what sea level was, wasn't it?

A. Yes, sir.

Mr. HARKNESS: Well, he could take zero.

Mr. HENDERSON: Yes, it is arbitrary. I suppose in railroad work the railroads of this country desire to know the actual altitudes of the country?

A. Yes, sir.

Q. Yes, they connect with lines that go to sea level. Now, I want to ask you, you say that the present dam, the diverting dam raises the water about eleven feet at Hanging rock?

A. No, sir.

Q. How much?

A. At the site of the present diverting dam?

Q. About how much at Hanging rock?

A. About two feet and eight-tenths.

Q. And as it is now, when you say it would flow the Ferguson land, you mean this cut of 200 feet that is in this strip?

A. Yes, sir, the backed part of the river extends on to the Ferguson property.

Q. And any raise that would be made in that dam or any other, would flow just as much more as in proportion as lay where that level of water would reach it?

A. Exactly.

Mr. WEDGWOOD:

Q. I would like to ask one question: Now, Mr. Searle, will you kindly give us the height in feet from your data in elevation of the 25-foot dam, which flows water back, or from which covers sixty acres, flows the water back over sixty acres; of course we could figure it out; but like to have you give us the computation the same as you did the height of the water at Middle rock?

A. Twenty-five feet.

Q. Well, I mean in feet from this line that you have stated that you took your survey from?

A. Twenty-five feet.

644 Q. 25 feet?

A. Yes, sir.

Q. Well, I understood you, Mr. Searle, the height *h* in feet from the line which you took in making your survey of the water at Middle rock, was 5,183 feet?

A. That was the height of the water at Middle rock.

Q. Now, in the same way as you arrived at that 5,183 feet I want you to give us the height of this 25-foot dam that you have spoken of?

A. $5,210\frac{3}{10}$ feet.

Q. 5,210 and what?

Mr. HENDERSON: Just a moment.

Mr. HENDERSON: Well, I want his answer.

Mr. HENDERSON: Well, just a moment. I object to it.

Question and answer read.

Mr. HENDERSON: I want to know what he is asking about; whether he is asking it for personal information, or as testimony in this case?

Mr. WEDGWOOD: It is cross-examination in this case.

Mr. HENDERSON: Well, I object to it; I don't see what point it has in this case.

The COURT: In his direct examination there was something in regard to sea level and the height of it there with regard to sea level.

Argued to the court by respective counsel.

The COURT: Let him answer the question.

Mr. HENDERSON: Give us an exception.

Mr. WEDGWOOD: He has answered it.

Mr. HENDERSON: I move to strike it out then on the ground that it is misleading and confusing, and that it is for the purpose of misleading the witness.

The COURT: Motion overruled.

Mr. HENDERSON: Give us an exception.

645 Mr. HENDERSON:

Q. Mr. Searles, do you say now that the change, or the making of any difference between your sea level and Mr. Wedgwood's sea level—if you either of you know anything about it—would make any difference in the actual altitude that you measured there, between the different points on this stream?

A. No, sir; the dam would still be 25 feet high.

Q. The dam from the earth as you could see it would be 25 feet high at that place?

A. Yes, sir.

Q. And the water that would be raised by it, would only flow as much land as would be within that level?

A. Exactly; that is correct.

Recess until 2 o'clock p. m.

Resumed session at 2 p. m.

Mr. HENDERSON: I will now offer in evidence this testimony and letters of Dodge's, and I want to point out if the court please the particular portion that I offer and state the reason that I offer it. Of course it all goes in under the talk that we have had, but I don't dare to offer as testimony in our own behalf only certain portions of it and for a certain purpose, and I offer that portion of Mr. Dodge's testimony in relation to when he first learned about Mr. Nunn's enterprise both on direct and cross-examination. I will call attention to that part when I come to it, but I will read the whole of it as a connected piece of testimony: (Reads the testimony of Mr. Dodge on former trial, leaving out objections, rulings, etc. and the letters, down to and including the following:) "Did you on the 23rd day of March, or down until considerably later, know that your line would in any way conflict with any right that the defendants here claim? A. I did not."

Now from here down to what I indicate is what I offer, and I offer it upon the ground as an admission from the defendant:

646 Reading: "Q. When did you first learn that they were to have a dam over 15 feet or 25 feet at the outside?

A. I think it was some time in May or June. It was so reported that they had changed their plans.

Q. Then you discovered that your two projects would conflict?

A. About that time, yes, sir; I received notice that they had changed their plans from a 15 or a 20 foot dam to a 60 or an 85 foot, I don't know which."

Now, that is all in the direct examination that I offer, and I will call attention to the cross when I read it. (Reads cross-examination of Mr. Dodge down to and including the following:)

"Q. By Mr. Yard, put in the form of a report to you, I suppose?

A. Yes, sir."

Now that is what I offer as an admission:

"Q. When did you first hear that Mr. Nunn contemplated building a dam in this river to make water power?

A. I will not be sure but I think it was in the fall of 1895."

"Q. Yes, you did hear of it more than once prior to writing your letter of March 5th?

A. I think I did.

Q. Had you recently heard of it prior to March 5th?

A. I do not know that I had immediately prior. I had heard they *they* were going to build a dam in Provo canyon.

Q. In this letter of March 5th, I want to read you a line: 'Since commencing this letter I have received yours of the 3rd inst.;' that is Yard's letter of March 3rd, I suppose, have you got that letter?

A. I have not, here."

Now, that is as far as I care to introduce it. I will read the balance of it. (Reads the same.) Now, that is all of his testimony. Now, I will read the letters and they here are in the order in which they are dated: (Reads letters in their order down to and including telegram dated "Denver, 8/2, '96.") Reading the same "Cost about a thousand dollars."

Mr. HARKNESS: That is the one we claim should read "cash."

Mr. BAILEY: Shall we introduce the original?

647 Mr. HARKNESS: Oh, I don't care anything about it. You can read it "cost" if you want to. It is manifest that a contract wouldn't cost just a thousand dollars.

Mr. HENDERSON: There is the telegram and if there is anything about it we will put that in.

Mr. HARKNESS: Oh, I don't care anything about it.

(Mr. Henderson reads the balance of the letters referred to.)

Mr. HENDERSON: That is all of them. Now the original, we will offer that in place of the printed copy in the book.

(Paper marked by reporter "Def'ts' Ex. 8, D. H. R.")

GUY C. STERLING, called and sworn for the defendants.

Examined by Mr. HENDERSON:

Q. Where do you live Mr. Sterling?
A. In Provo.
Q. How long have you lived there?
A. About two years.
Q. What is your business?
A. Civil engineering.
Q. Did you have anything to do with assisting Mr. Nunn in the project in Provo canyon?
A. Yes.
Q. When did you first go up there and examine the line?
A. I went up there on January 9th, '96.
Q. January 9th?
A. Yes, that was my first trip up there.
Q. There was a contract introduced in evidence here the other day, between yourself and Mr. Nunn in relation to putting a line of pipe for their—or not a pipe, but a flume; you are the party that entered into that contract?
A. Yes, I made a contract with him in regard to the construction of the flume.
Q. When did you first commence talking with Mr. Nunn about that?
A. Well, I first commenced to talking with Mr. Nunn about that some time the latter part of February, I think.
648 Q. Had you talked with anybody else connected with the company or with Mr. Nunn previous to that?
A. Yes, I had talked with Mr. Cramer the engineer in charge up there the first part of January, I think I met him.
Q. Now, you say you commenced talking with Mr. Nunn in February?
A. Yes, I think it was in February. I think I started the latter part of February.
Q. How soon, or about what time was it finally arranged that you was to have the contract?
A. Why, closed the contract on March 25th, I believe that was the date of the contract.
Q. That is the date of the signing of it, but how long before that if at all had it been determined that you was to have the contract?
A. I had it practically determined in February, and Mr. Cramer, so far as he was concerned, he decided in the early part of January.
Q. But it wasn't finally determined?
A. Wasn't settled with Mr. Nunn until I met him in February. The contract was made and signed on March 25th.
Q. Now, did you do some work up there besides that?
A. Yes, after the contract was signed Mr. Nunn employed me to go up there and locate, make a location survey for that piece of flume.
Q. And did you do it?
A. Yes, I did it.

Q. And did you cross-section it at this time?

A. No, I simply—I cross-sectioned it for the purpose of location, but not for the purpose of grading, but the line was cross-sectioned though immediately after it was located, and construction began on it immediately after it was located.

Q. Well, you had never been on that line previous to that time?

A. I think that particular line had never been surveyed before.

Q. Well, had one been surveyed along substantially that line before, or near that line?

649 A. Well, of course in asking me that question I can only tell you what I saw at the time I was there.

Q. Well, that is what I mean.

A. But to say what they did or what they didn't do I don't know.

Q. What did you see at that time?

A. I saw below that a line that was below it had been surveyed, and a dam site had been selected, and I had been told by Mr. Cramer at this time in January that at this Middle rock, which was the head of the line which I located, they intended to put in a dam, and he showed me a line of flags on the hill there, which I suppose was 50 or 60 feet above the river. And I think that is the only two lines that I know definitely of.

Mr. WEDGWOOD: Wait a minute; we object to it as not being responsive.

The COURT: To the question.

Mr. HENDERSON: How is that?

The COURT: It isn't fully responsive to the question.

Mr. HENDERSON: Well, that is what he says he saw there.

Mr. WEDGWOOD: Well, let it go.

Mr. HENDERSON:

Q. Now, do you know anything about when work was actually commenced grading on this, grading the line in this place where you was to put in the flume?

A. Why, I wouldn't undertake to be absolutely positive, but I am very confident it began immediately after it was located, about the middle, or the first—or the middle of April.

Q. Yes, and do you remember whether it was commenced, was it commenced while Mr. Nunn was here yet at that time?

A. I could not say.

Q. You don't remember that?

A. No.

Q. Well, that wasn't in your contract or agreement?

A. No, that grading—as soon as I located the line I came out of the canyon.

650 Q. Oh, I see, you was simply to put the flume in?

A. Yes, on the grade.

Q. Not, at that time, in February, when you saw Mr. Nunn, and while you was talking about taking this contract, did Mr. Nunn say anything to you about the character of his enterprise up there?

A. Yes.

Q. Now, I ask you what it was he told you at that time?

Mr. HARKNESS: I object to that.

Mr. HENDERSON: Now, if the court please, that is the same class of testimony that I offered once before, and I offer it now to show by this witness that at that time Mr. Nunn explained to him the purpose for which he wanted this flume made; that he explained to him that that work that he was putting in there was temporary, and showed him the place where he proposed to put in his high dam, and at the height of 60 feet or as this raised the water to the 60 feet, and the dam above that, and told him generally what there was about it; explained to him about it, and I ask to put that in as a part of *res jestæ*.

Mr. HARKNESS: I desire to limit my objection. We don't object to what he told him about the flume, about his contract that he was to build; we object to any of that evidence in which Mr. Nunn went on to explain his further plans.

Mr. HENDERSON:

Q. Very well, for the time being I will withdraw that. What did he tell you about this flume and what it was to connect with, and generally what about it?

A. Well, in talking with Mr. Cramer and Mr. Nunn, and Mr. P. N. Nunn——

Q. How was that?

A. I say, in talking with Mr. Cramer and Mr. Nunn and Mr. P. L. Nunn, of course I was doing all I could to get them to adopt my particular style of flume, and one of the reasons why I as a recommendation of the particular style of flume, which I held out
651 was that it could be taken apart without damage and without difficulty, and moved for use on another line, and I made that recommendation because I understood from them that they intended——

Mr. HARKNESS: One moment, that is where we make our objection as to what you understood from them.

Q. Yes, you may say, did he state to you anything about whether that flume was to be temporary or not?

A. Yes, I understood distinctly that this was a temporary plant.

Mr. HENDERSON:

Q. Now, if the court please, I offer by the witness further to show that he further explained to him where they were to build the dam; that it was either as Middle rock or Hanging rock, and that it was to be raised there sixty feet to take it out on the line of the sixty-foot level, that the water was to be taken there and carried down; and that a dam was to be raised above that for reservoir purposes; and explained to him fully his proposition there in the canyon.

Mr. HARKNESS: Our objection to that is that a declaration of this gentleman's to Mr. Nunn and others—or Mr. Nunn to him, to their own employees is not evidence against us as to what their ultimate

intention or plans were; declarations in their own favor is not declarations against any third party.

Mr. HENDERSON: It was made before the time when there was any evidence whatever to show there was any controversy.

The COURT: I think the court has already admitted similar testimony; let it be answered.

Mr. HENDERSON:

Q. Just state now what he said, what Mr. Nunn stated to you at that time about what his purpose was there in the canyon, and how he explained it to you?

A. Well, of course I can't repeat anybody's exact statements.

Q. Well, the substance of it?

A. I will tell you the substance, the understanding that I had——

652 Q. No, no, tell substantially what he said to you, if you can't repeat it, I don't suppose you can, but the substance of what he said?

A. Well, the substance of it was that this line for which they wanted this present flume was for temporary purposes, and that the intention was to ultimately put in a higher line, and build and continue that higher line down to the mouth of the canyon; that is the substance of it.

Q. Anything said as to the purpose for which he would use the temporary plant, in the construction of the larger works?

A. Well, no, I can't say that there was anything said in that particular regard.

Q. As to power or anything of that kind?

A. Well, of course it was to create power with this plant, but I can't say he told me he expected to use that power to build this plant with, or any other plant with.

Q. Well, did he say anything, or show you any place where he expected to take the water out, on what level?

A. For the higher line?

Q. Yes?

A. Cramer showed me this line that I speak of, about 50 or 60 feet above the river at Middle rock.

Q. Yes.

A. And that was the line so I understood this higher flume was to go on.

Q. Now, let's see, you are an engineer?

A. Yes.

Q. How long have you been engaged in that business?

A. About 11 or 12 years.

Q. Ever engaged in any railroad work?

A. Yes.

Q. How long?

A. Well, I had about two years experience on the Union Pacific.

653 Q. Have you ever made any—given any time or made any figures, any computation as to the relative values of the plant as it now exists up there, and one with a dam 25 feet high located at Middle rock or Hanging rock?

A. Yes, I gave some consideration to that.

Q. You have given some consideration to that; I will ask you what the difference is in your judgment in net value of the privilege of maintaining the present one as it now is, between that and a dam 25 feet high at Hanging rock, or Standing rock, not Standing, I mean Hanging rock.

Mr. HARKNESS: We simply renew our objection on the ground that that is immaterial, and has no bearing upon the case.

The COURT: The same ruling.

Mr. HENDERSON: Go ahead now, have you made such?

A. Now, as I understand you want to know how much more a plant will be worth, this present plant will be worth with a 25-foot dam at Hanging rock, than it is now, is that substantially——

Q. Well, the privilege of maintaining—well, yes, state that?

A. Well I figure as a matter of insurance and as a matter of storage from full use of power fo- part use of power, that such a right and such a dam would increase the value of the present plant about a hundred thousand dollars.

Q. Would be how much?

A. I say it would increase the value of the present plant about a hundred thousand dollars.

Q. Now, would it increase the water privileges?

A. Well, that is the way it would increase it, because it would give them more power.

Q. Well now you say the present plant; suppose that the company was trying or wanted to utilize and wanted to put machinery there to utilize all the power that they could do with such a dam, would that increase the value?

A. That is how my figures are based on that such a dam
654 would increase the power about, theoretically about 25 per cent.

Q. Now, I call your attention to this railroad grade up there, you say you have done, had some experience in railroad grading?

A. Yes.

Q. What is in this country deemed a reasonable railroad grade?

A. You mean the rate of climbing or falling?

Q. Of climbing or falling? Yes.

A. Well, that is a question in order to answer depends entirely on the traffic, the kind of engines you are going to use, and that you have got on that road, and the amount or number of trains you are going to run per day, in general on the traffic.

Q. Let me ask you this question, is two per cent. grade a perfectly practicable grade?

A. I consider that a two per cent. grade for a thorough, for what you call a trunk line, is a perfectly practicable grade, and if I am allowed to state how I consider it so, is because I have been on railroad locations for lines which are practically continental lines, in which a two per cent. compensated grade was effected. So for that reason I know that it is all right.

Q. Now, did you become acquainted with the character of the

country and the banks of the creek and the country along up about Hanging rock?

A. I only know of them in a general way. I never looked at 'em particularly or closely.

Q. Have you ever looked along there to see whether at Hanging rock a grade could be had along on the southeast side hill there at that particular point, 25 feet up from the, well, from the bank of the stream?

A. From the surface of the edge of the water in the stream, is that what you mean?

Q. Well, I said it that way, from the edge of the water, or from the level of the edge of the water?

A. Well, I would have no hesitation in saying that it is
655 practicable to build a line on that elevation up there?

Q. I understand you haven't made any careful study?

A. I haven't made a close investigation of the matter at all.

Q. Well, I won't ask you about that; that is all.

Cross-examination.

By Mr. HARKNESS:

Q. With money you could build a railroad anywhere, couldn't you?

A. Yes, of course you go a good deal on the money.

Q. And when you say a two per cent. grade is practicable, you would take that when you couldn't do any better?

A. Certainly; you couldn't adopt a two per cent. grade if you could get a one per cent.

Q. And a level grade would be an ideal one, wouldn't it?

A. Certainly.

Q. If a railroad on the south side 25 feet higher is practicable, it would be a greater expense, would it not?

A. Please ask that again.

Q. I say, if a railroad on the south side 25 feet higher or any number of feet higher is practicable it would be a more expensive track, would it not?

A. Than what other track?

Q. That one located down?

A. That one located lower?

Q. Yes.

A. I couldn't answer that without having the topography.

Q. You haven't examined enough to know; now, Mr. Sterling, you went there—or you closed your contract finally March 25th, then you say you located the flume?

A. Located a line upon which it was to be built.

Q. Will you just state where the line commenced, take the
656 northeast end as you started down?

A. The line that I located the head of it was at Middle rock, and the course was run along parallel to the river, on a grade of five feet to the mile for 4,000 feet down the river from Middle rock.

Q. And when that—of course you found stakes of other lines that had been previously run?

A. Well, I saw them above it and below it, flags stuck along various lines.

Q. Do you know whether the grade of the flume was finally put upon your location?

A. It was put—well, there was this change occurred. Mr. Nunn came there after I had made the location and I think after construction begun, and decided to move the dam down the river 600 feet, about 600 feet, but he didn't change the elevation of the grade.

Q. Then he moved it from Middle rock down to where his present diverting dam is?

A. Yes.

Q. Then from the point from where it was moved to from there down was built on the line you located?

A. From there down was built on the line I located with the exception of a few changes, a foot or two here and there, that were horizontal changes, not changes vertically.

Q. About what date did you commence that location?

A. I think it was on the first of April, about that, the first of April.

Q. And how long did it take you to locate it?

A. I finished the work in two weeks; I was just up there two weeks. I can't remember that I was working all the time on the location, but that was the time I was up there.

Q. That would carry it to about the middle of April, 1896?

A. Yes, that was the time I quit.

Q. And then did they commence grading on it?

A. I think they commenced before I got it entirely located.

657 Q. Had they done any grading on that line before?

A. To the best of my belief.

Q. I understand you when you went up there you found a dam site had been secected?

A. They had one below and this one above that at Hanging rock, I understood that that was to be the dam site.

Q. You say Hanging rock, or Middle rock?

A. Yes, Middle rock, and one below that.

Q. Now, the one below that is that where the present head of the flume is, or diverting dam?

A. No, it was below that.

Q. Below that, how far below that?

A. Oh, I guess it was, it is all guesswork as to these distances, might have been 2,000, might have been 1,500 feet, and may have been not over a thousand; I could not say.

Q. What evidence did you see of the selection of a dam site, Mr. Sterling?

A. I was told there on the ground that Mr. Nunn, and he told me that that was the dam site. I saw the ground cleared away there, and saw stakes marked.

Q. How was that stake marked?

A. Well, I don't remember distinctly the mark that was on it. I

know it was something that plainly showed though or in connection with the dam.

Q. How high was the stake?

A. How high was the stake?

Q. What kind of a stake?

A. How high above the ground do you mean?

Q. Yes?

A. The top of the stake above the ground?

Q. Yes?

A. Oh, I guess it was about two feet perhaps.

Q. Was it lettered, marked in any way?

A. Yes, it was marked "dam," I remember seeing that word on it in pretty large letters.

Q. Was it not marked "top of dam," Mr. Sterling?

A. It may have been; I don't remember exactly.

Q. Was you a witness here about a year ago in this case?

A. Yes.

658 Q. You testified then on this subject?

A. I don't remember on this particular subject.

Q. Don't remember being asked?

A. I was asked in regard to my connection with the company, but I don't remember what the particulars are.

Q. Well, do you remember whether or not you then stated that that stake was marked "top of dam"?

A. No, I don't remember that.

Q. If you did so state, your memory then would be better than it is now, wouldn't it?

A. Well, if I said so then I certainly believed it.

Q. How high was that stake above the river?

A. I don't remember that; it may have been ten or fifteen feet.

Q. How near was it to the level of the flume bed?

A. Well, it was quite a good ways below that. I should think it was, oh, I don't know, might have been 20 or 30 feet below it.

Q. Now, Mr. Sterling, when you surveyed the flume first was it to connect with the river at Middle rock or near that?

A. The grade yes was connected with the river practically; the grade of the flume was two feet above the low-water mark of the river at the head, and then we proposed to put in a dam and raise the water into the flume.

Q. How high a dam would it have taken at Middle rock?

A. Well, it would have taken a dam then about seven or eight feet high.

Q. To turn the water?

A. Yes.

Q. Now, when the head of the flume was moved on down to where or near where the present diverting dam is, wasn't there some change made in the level of the flume to connect with the river there?

A. No, just to build in, put in a higher dam, that was all.

Q. A higher dam, how high would that dam have to be?

659 A. Well, that depends on the fell of the river in that distance. I suppose that the fall was probably six feet.

Q. In order to divert the water you would have made the dam 12 feet higher than at Middle rock?

A. Certainly.

Q. You understood that same day that another dam was to be put in there a bigger one?

A. I understood that they wanted to put in at Middle rock a higher dam.

Q. You didn't hear Hanging rock mentioned as the place?

A. Now, what time do you refer to?

Q. At the time that you were making this contract, and surveying this line?

A. Well, in April, I certainly did hear of an 85-foot dam.

Q. At Middle rock?

A. No, sir; not at Middle rock.

Q. When was that you say?

A. When I was up there doing that work, in April.

Q. What time in April?

A. Well, that was during the first part of April, from the first to the 15th.

Q. Well, at what time was you told by Cramer that the dam was to be at Middle rock?

A. In January, the 9th.

Q. Afterwards some time in the first, part of April, you heard there was to be any 85-foot dam?

A. Yes.

Q. At Hanging rock, or somewhere?

A. Yes; I heard that they proposed to move the dam up there.

Q. And what height was the dam to be, that Cramer spoke to you about in January at Middle rock?

A. I don't remember that he stated the height. I was simply assuming, and my idea was that it was at least 50 or 60 feet above the river where this flag was which he stated was on that higher line.

Q. Now, what time in April, Mr. Sterling, can you say that you first heard of the 85-foot dam.

660 A. I think it was practically the very first part of April.

Q. Well, let's see, I think you commenced work?

A. I commenced work on the survey the first, about the first of April.

Q. Well, did you hear that while you was doing that surveying or after you went to work on the contract?

A. Oh, I didn't go to work on the contract until August.

Q. Mr. Sterling was your contract in fact closed until about August?

A. Closed, oh, yes, it was absolutely signed and sealed on the 25th of March.

Q. Were there no differences between you and no changes made after that before you went to work?

A. I don't remember of any kind of a change at all.

That's all.

Mr. HENDERSON: That's all.

Mr. HARKNESS:

Q. I would like to ask Mr. Sterling this, Mr. Sterling, on the previous examination I will ask you if you did not testify this, or this in substance?

Mr. HENDERSON: What page are you reading from?

Mr. HARKNESS: I am reading from page 138, and I refer to the trial in this court-room about a year ago.

A. Yes.

Q. Reading: "When I made my contract the head of the dam was located there about 1,500 feet or so above the bridge. I saw stakes marked 'top of dam.'"

A. 1,500 feet above what?

Q. "1,500 feet or so above the bridge?"

A. Yes.

Q. "I saw stakes marked 'top of dam.'"

A. Yes.

Q. "The time I saw them might have been in August." Does that refresh your memory?

A. I don't remember it, but as I said before, if I stated that at the time, I believe it was so. I don't remember now, of ever saying that, or seeing the stake marked "top of dam," but I do remember
661 seeing the stake that had the word "dam" on it. I remember seeing a stake that had the word "dam" on it. I don't remember what it had in addition to that.

Mr. HENDERSON:

Q. Now, did you further say "About 1,500 feet or so above the bridge I saw the stakes marked 'top of dam;' the time I saw it might have been in August; that was not the place where the dam that flume was to connect with was."

A. No, that is not the dam that this flume connects with.

Q. No.

A. Or a dam that this flume was ever intended to connect with.

Q. No, that wasn't the place that the dam at the flume was to connect with; that's all.

CHARLES DE MOISY, sworn for defendants.

Examined by Mr. HENDERSON:

Q. Mr. De Moisy, where do you live?

A. At Provo.

Q. What is your business?

A. I am practicing law.

Q. What was your business formerly?

A. Civil engineering.

Q. How long did you practice that?

A. From 1869 until 1893.

Q. What kind of work was you engaged in?
A. All kinds of civil engineering.
Q. Did you ever have any railroad experience?
A. Yes, sir.
Q. How many years?
A. I can't tell that without stopping to count; let me see——
Q. Well, approximately.

Mr. HARKNESS: Oh, we don't deny his competency.
Mr. HENDERSON: All right; I will withdraw that.

Q. Now, have you examined Provo canyon? Are you acquainted with it?
662 A. Yes, sir; I am, somewhat.
Q. You are acquainted with the Provo river?
A. Yes, sir.
Q. And have you seen, have you been up there and examined it lately?
A. I was up there yesterday morning.
Q. You was up there yesterday morning?
A. Yes, sir.
Q. And do you know the place called Hanging rock?
A. Yes, sir.
Q. A place that is called Middle rock?
A. No, I don't believe I know where Middle rock is, by that name.
Q. Now, do you know where the South fork comes in?
A. Yes, sir.
Q. And did you make an examination along there yesterday?
A. I made an examination from, oh, possibly a half a mile above the wagon bridge at Bridal Veil falls up to South Fork canyon, up to where the South fork comes into Provo.
Q. Did you look at or take any notice of a survey for what is said to be a line of railroad up there?
A. Yes, sir; I found the cuttings and the stakes.
Q. You found the cuttings and the stakes, and did you find the center stakes in any place?
A. I think that is all I did find.
Q. That is all that you did find?
A. Yes. No, I remember I found some bench-marks and some level pegs. I judged one to be a bench-mark, marking the elevation; that was marking the elevation.
Q. Did you follow that any considerable distance up there, that line?
A. Probably five or 600 feet I followed the line, where I could follow the stakes and I could follow the cuttings.
Q. Well, how about the cuttings, how plainly were they—would they indicate so that you could follow?
A. Oh, if it had not been cut I couldn't ever have got through the brush.
Q. Well, was it cut out so that there was a path leading through where the line ran?

663 A. Yes, cut out so that it can be seen through, but you have to climb over the brush and it is pretty rough, but it is an open way through the brush.

Q. Well, in finding that did you find anything else then, angles in that line?

A. No, sir; yes, wait——

Q. Did you find any place where the curves were run in between the angles——

A. Wait a minute, let me correct that. The places that I had in mind where we only found angles, there were curves marked on the ground, and part of the work is done there, and where the work had been graded the curves are marked on the ground; the work marks the curves.

Q. Well, I mean outside of that?

A. Wherever we found the line, more particularly we examined it close to South fork, I found nothing but angles; I found no curves at all.

Q. Did you look to see if the curves were run in?

A. Yes, sir.

Q. And were they run in that you could find?

A. No, sir; we looked for the curve stakes and I couldn't find them.

Q. Now, I ask you if you made examination of the ground along that line, particularly at Hanging rock?

A. Yes, sir; and from there on up the river.

Q. And from there on up the river; now, have you learned what the claimed grade of the railroad is for half a mile this side of Hanging rock?

A. All I know about it is what Mr. Bailey told me last night.

Q. And what was that, what was your understanding?

Mr. HARKNESS: Well, I think we will object to his understanding.

Mr. HARKNESS: Well, I don't offer that for the purpose of showing that it is true, but am assuming to fix in his mind a basis for a statement; that is all, for his judgment. I want to see if he has got it right, and if he hasn't I want it corrected.

The COURT: Read the question, Mr. Reporter.

Question read.

Mr. HENDERSON: Well, I will withdraw that and get it from here.

664 Mr. HARKNESS: Well, we don't want to take any more time than is necessary. Let Mr. De Moisy state his understanding.

Mr. HENDERSON: Well I want to have it correct. I don't want to have any doubt about it.

Q. Now, Mr. De Moisy, I show you the profile of the map, and which station do you say it was?

A. 633 is where it is.

Q. At 633. Now I have shown you the profile of the map of that line, and I call your attention to the place that you have spoken of as Hanging rock.

A. Yes, sir.

Q. And going back down the canyon——

A. Down the canyon?

Q. Going back down the canyon a half a mile from that, I wish you would examine and take note of the grade.

A. I notice it.

Q. Now, Mr. De Moisy, calling your attention in the first place only to the grade of the profile, and the rise and fall, I ask you if it is entirely practicable to raise that grade, commencing back from a proper distance and raise it so as to pass that point 25 feet above over a 25-foot dam, say five or six feet above a 25-foot dam?

Mr. WEDGWOOD: That is under the same objection.

The COURT: Yes.

Mr. HENDERSON: Certainly. This is subject to the same objection, that is our agreement, I understand.

Mr. WEDGWOOD: Well, there is no agreement that everything 25 feet should be objected to, but there is an agreement as to the exceptions.

Mr. HENDERSON: Yes.

A. You say 25 feet above the water, or 25 feet above their grade line?

Q. Well, raise the present grade line, that they have got 25 feet from what it is now?

A. Now, repeat your question please, did you ask if it is practicable?

665 Q. If it is practicable to go back there and raise that so as to carry it 25 feet higher at that point of Hanging rock than it is now?

A. Yes, sir.

Q. I mean as a grade proposition?

A. Yes, sir.

Q. Would it—could it be done keeping under a two per cent. limit?

A. Yes, sir.

Q. Now, I ask you from that point, going on up the stream, would it be perfectly practicable and good railroading to run the line from that point 25 feet higher than it is now, skirting along the water level, keeping it on a level until it went back and struck the grade that it is now on?

A. Yes, it is practicable.

Q. Yes; now I am speaking of that as a mere grade proposition?

A. Yes, sir.

Q. Now, Mr. De Moisy, I want to ask you if you made examination of that face of the country that would be occupied by making such a line as that?

A. Yes, I examined the property too; I examined the side of the canyon there, I think for about a mile and a quarter or a mile and a half, seems to me, below South fork, as near as I can judge it; I think that is about the distance, and that would be, that would

probably be 35 or 3,600 feet, maybe 4,000 feet below the dam, below Hanging rock.

Q. State whether it is a construction proposition whether it is practicable to build a road along that line such as I have indicated?

A. Yes, it is practicable.

Q. State how it would compare in your judgment to the practicability of the construction on the proposed line such as they have laid out there?

A. Well, there is a part of it that there would be very little difference in, seems to me; there are one or two places where there
666 would be a difference I think going up *up* there where they would necessarily back down the river to run their grade to reach that point that you speak of at Hanging rock or that part of the work up to Hanging rock would be practically the same; above Hanging rock, from there on up until we get opposite Ferguson's place there would be very little difference, I can see very little difference in the construction, but when we get to South fork there is a difference.

Q. Yes, what is the difference?

A. Well, it would necessitate a very considerable fill across South Fork canyon; it might necessitate a cut on the east wall of South Fork canyon, pretty heavy cut.

Q. Yes; now would that escape some difficulties up there?

A. Yes, sir.

Q. What?

A. Well, as near as—of course I am speaking now from what I observed on the ground.

Q. Yes.

A. Their line runs through the river up there, and it is pretty hard to follow it, because it isn't marked on the water, and I had to judge where it would be; the line appears to swing across the canyon there.

Q. Well, from, I will show you that blue print; now I direct—Mr. De Moisy, I put in your hands the blue print, what has been called in this trial the blue print showing the line of that road, center line of the road along there by the South fork.

A. Wait until I locate my points. Now, I have it.

Q. Now, I will explain that the center red line there represents the center of the proposed track, and the two purple lines represent the limits of 100 feet on each side, and I think the river is indicated there so that you can understand what that is, and I think the other points on the map indicate it so that you can see it.

A. Yes, this about the way that I imagined they ran that line from the stakes that I found on the ground.

667 Q. Yes.

A. After that passes the point on the west side of South Fork canyon they swing into the valley across the river in the water, and then up the stream near—oh probably six or 700 feet above the South Fork canyon then come back onto the south side

again; that is my recollection of it, and this map indicates about the same.

Q. Now, I believe the profile shows a heavy grade along there?

A. No, it shows a very light grade along there.

Q. A light grade?

A. Yes, sir; it is only one-tenth per cent.

Q. I don't mean that I mean the fill; show a fill through there?

A. No, it shows a little heavier from South fork up than it does from Hanging rock up to South fork.

Q. I don't mean the raise and fall; I mean the fill?

A. The fill?

Q. The fill.

A. No, it isn't a heavy fill.

Q. Well, we went all over that this morning. I don't know in railroading I am sure——

A. No, I don't call that a heavy fill.

Q. How much is there practically?

A. Well, it would run five or six feet.

Q. Now, you see what the situation is there?

A. Yes, sir.

Q. Now, how would the expense in your judgment compare up there of running these two?

A. Well, it depends entirely on what is in the bottom of that river, or what is in the bottom of that canyon, and that is exactly how to compare expense; because if that was all soil in there and could be graded out and these ditches made and the river changed as I suppose they intend to do from this map, as it indicates it, then that would be comparatively cheap work. If that was all boulders, and rock, it would make a pretty heavy cost.

Q. Have you any judgment?

668 A. I can only guess what is in the bottom of the river.

Q. From what you know about that what is the character of the fill in that stream?

A. Well, I have an idea it would be a pretty hard before they get down enough to change the bed of the river; the rest of the river bed is pretty hard, full of boulders.

Q. Well, judging from what you can see and understand up there what do you say you think the difference would be?

A. In dollars and cents?

Q. Well, yes, or in proportion, or any way you see fit, if you can explain what difference there would be, if any, between the construction or cost of construction?

A. I have been trying to figure what I think the difference is but I have been unable to do it, because there is an unknown factor in the bottom of the river. If that is good soil to work, it is very cheap, to throw that bank up and change the river; and if it is bad, it is expensive; and then we would have the increased fill across South fork that would probably instead of being six feet, an average of six feet, would probably be an average of fourteen or fifteen feet across there.

Mr. HARKNESS: Well, Judge Henderson's question was 25 feet above the present level.

Mr. HENDERSON:

Q. Oh, 25 feet at the Hanging rock.

A. I think your question was this, I may be mistaken, you said 25 feet above Hanging rock, and level from there on up.

Q. Well, level from there on up until it got back to the original line?

A. Well, a level line; now that is what my answer is referring to; if that is wrong then my answer is wrong.

Mr. HARKNESS: The question, he said take it 25 feet above Hanging rock, above the track?

A. Yes, sir, and then I understood him——

Mr. HENDERSON:

669 Q. Just a moment, if I said that I didn't mean 25 feet above the—I mean 25 feet above where they have not located it?

A. That is what you said.

Q. Yes.

A. And then I understood you to say to run a level from there up, is what I understood; now if that isn't right, why then my answers are all wrong.

Q. Well, now, Mr. De Moisy, let me—there is a misunderstanding about that, let me ask it again; I will ask you to give us a statement on a raise made commencing back below Hanging rock, and raising up there so as to raise over a 25-foot dam, raising high enough over the top of it to protect a railroad track from the dam and the water, and then running on back up the river on that level substantially until it got back to the line, that is, that they have located there?

Mr. HARKNESS: That is to say going over—may I make a suggestion?

Mr. HENDERSON: Yes, sir.

Mr. HARKNESS: The 25-foot dam has been given by Mr. Searle as 25 feet above high water at Hanging rock.

Mr. HENDERSON: Well, I will say 25 feet above, not high water but medium.

Mr. HARKNESS: Very well, then we will understand the basis.

Mr. HENDERSON: Yes.

A. Well, the grade line at Hanging rock on this profile is to be 15 feet above the water line.

Q. Very well.

A. Now, I have estimated on a line 25 feet above that, which would be 40 feet above this water line.

Q. Well, come down on that then, come down to a line that would carry the road over such a dam as that just enough above it to protect it from the water that would be raised by it?

A. Well, I think you couldn't come but five feet anyhow.

Q. How is that?

670 A. I think you could only come five feet anyhow; I think the road-bed ought to be ten feet above the dam; if the dam is 25 feet high, it ought to be 35 feet above the water line instead of 40.

Q. Well, 35, now if that makes any difference?

A. Well, it makes five feet difference on that fill at South fork.

Q. Certainly and that would be the heaviest part of it?

A. Yes, sir; well, I am about right there; that is what I was answering on, yes, that fill would run from 18 feet to about probably nine or ten feet; on the lower side it would be a deeper fill than it would on the upper side.

Q. Yes; now at that point about how much above the present line of the road as it is laid out would that be?

A. How much higher than the present grade?

Q. Yes.

A. Well, the grade would be changed.

Q. Yes.

A. It would be conical; on the lower side it would be just about the difference that I tell you now.

Q. About how much in feet?

A. No, it would be about 15 feet above on the lower side and would be about eight or nine—seven or eight on the upper, above the present grade line.

Q. Yes, well now, is the figures that you have given before, the statement that you have given before on that same basis?

A. Well, I have just corrected this. All the rest of it I think would apply anyhow.

Q. All the rest would apply?

A. Yes, sir.

Q. But as to that grade it wouldn't?

A. No, it wouldn't. Simply be the five feet difference if you run that 25 feet above that grade line at Hanging rock, and then run it off level, it would make five feet more fill at South fork than if you run it up this other way.

Q. Yes, now make this comparative statement that I am

671 asking you, what would be the difference between that one and the building of it where it is now where they have laid it out in your judgment?

A. Well, I think as near as I can estimate it, I think possibly the cost of that fill in South fork would be about the difference in the cost of the work.

Q. Just the fill across South fork?

A. That is, the change proposed by you would cost that much more than the line that they have located.

Q. Just the grading of that?

A. It would be a fill across that; it is about 500 feet, as near as I can estimate it, 450 or 500 feet.

Q. And it would be how much of a fill?

A. Well, it would run from 18 feet on the lower side, up to about probably nine, ten or 12 feet on the upper side.

Q. And how would it be, estimating that change from the place, from one extreme end of the variation,—deviation from the platted line, what would you say taking it as a whole clear across there until it comes back again to the same line?

A. Well, that is just what I have answered you. I think that would be just about the difference.

Q. Well, I didn't know but what some other part of the line would modify it?

A. No, I don't think that would. It is barely possible that there would not be that much difference, but it depends upon the nature of the bottom of that river.

Q. Now, along down, for instance, take the place where you first leave the old track going up the stream, now, what is the fact about whether when you got up a few feet above the present line of the railroad it would be easier to operate—to build a railroad line than it is where they would build it?

A. The most of the side hill on the south side of the river is steepest just above the water line; the slope isn't as steep a few
672 feet away from the river as it is right close to it. It looked to me as if the toe of the slope had been washed out and carried away, and made the bottom of the slope steeper, and as far as the building of a road is concerned, the slope is there, and the least slope the better it would be for the road. I take it for granted that it is benched on; it looks like it from its work at least.

Q. Now, isn't it true that when they get up a little farther it would be easier grade?

A. It would not be any easier—I think it would be easier on account of the lighter slope.

Q. So that it would be rather beneficial there than otherwise?

A. Well, I wouldn't go so far as to say it would be beneficial. There wouldn't be any injury. It is practically the same.

Q. Now, what would you say, by the way, in making that figuring? What have you figured to make up that difference between the building of these lines; what have you figured the bottom of that stream to be where they are going to change the course of the river?

A. Well, I think, Judge, that there is probably a good many boulders and rock in it. I don't know; it might be solid and might not.

Q. It would depend upon developments there?

A. Depends upon where they would get their material to make their fills, and how they would cut their channel to change it; that depends upon detail work that isn't here.

Q. You say the difference would be approximately about that fill across that?

A. I don't think it would exceed it at all; the cut on this side wouldn't be any heavier, and I don't believe it would be as heavy as what is shown on that profile.

Q. And that would furnish the material for that fill, wouldn't it?

A. No, I think not; I don't think it would; I think it would par-

tually do it, but I don't think the two cuts would furnish all
673 the material for that fill.

Q. Well, there are cuts along there that could be—on that upper line that would furnish the material for that, is there not?

A. Well, that is a question of haul, Judge.

Q. How?

A. That is a question of haul. There is plenty of material to make that cut. The only question is is it close enough to the fill to pay to put it in there.

Q. Is there any difference on these banks of simply widening the cuts to get material?

A. Yes, there would be a difficulty; they would hardly blast out solid rock.

Q. Is it solid rock?

A. Well, I say it might be. I can only judge what is in there by looking at it; it may be solid, or may be loose, may be schale.

Q. Well, along in there there is certainly schale (indicating).

A. There isn't any question about getting material there conveniently.

—. Well, that is what I am getting at.

Cross-examination.

By Mr. Wetmore:

Q. Now, Mr. De Moisy, how far did you say you followed the line of the survey?

A. Well, we, let me see, altogether probably——

Q. Oh, approximately.

A. Well, wait a minute; I can tell, I was trying to remember. I took some notes of the stations.

Q. All I want is just generally.

A. Yes, I will tell you in a minute; at South fork probably altogether probably about 750 or 800 feet.

Q. Yes, you mean lineal, length?

A. Yes, sir.

Q. At that point?

A. Yes, sir; right at that point.

674 Q. Now, you say all the stakes you noticed were tangent stakes.

A. Yes, sir; all stakes on tangents.

Q. All stakes on tangents?

A. They were not tangent stakes, they had other marks on them that indicated something else, but they were all tangents.

Q. What other marks were on them?

A. Well, I remember one stake that was marked "P. S."

Q. Any others that you remember?

A. Let me refresh my memory, I took the notes of what I found. I found one stake marked "P. S. 665 plus 36."

Q. And what does that P. S. mean?

A. Well, I suppose that it is where the spiral begins for their curve.

Q. The point of spirral?

A. I suppose it is. It is a form that I never used, but I suppose that is what it means.

Q. It is a form that you never have used?

A. I never have used any spirrals in my work.

Q. You haven't worked since they began running spirral curves?

A. I have run spirral curves, but I know what they are, and that is what made me think that is what it was. If I hadn't known about a spirral curve I wouldn't have known what it meant, but it is a different form of marking from what I have ever used myself.

Q. Are you familiar with Searle's work on spirral curves?

A. Yes, sir—no, I won't say whether I am familiar with Searle's.

Q. Do you know whether that term is used?

A. I have only known Searle's hooks since I came to Provo, but I haven't run any spirral curves since I came to Provo.

Q. And then that stake had some relation to curve, did it not?

A. I suppose possibly it did, and that is what made me hunt for the curves.

Q. You say you didn't find any curve stakes?

A. I did not.

Q. Well, isn't that a curve stake?

A. No, sir.

675 Q. That is a point?

A. That is a point on a tangent where a curve begins.

Q. Yes.

A. It is the end of the tangent with the beginning of the curve, or the end of the curve with the beginning of the tangent.

Q. Then that reference to curve, that stake?

A. Yes, sir; there is no doubt of it.

Q. I will just ask you the question if you went up or down from that particular stake?

A. I went both ways.

Q. How far did you go?

A. Well, I came down the stream probably from that point, maybe 200 feet, climbed up on top of a point, and it was so rough that I didn't go down any farther.

Q. Well, did you go to the next stake below that stake?

A. Yes, sir.

Q. How far did you find that stake below?

A. I think there stakes, well, I found the first stake, 666.36 feet; I found 665; I found 664 plus 50; I think I found 664; the stakes are there on the ground.

Q. Take the profile, Mr. De Moisy.

A. Yes, sir; I don't notice on the profile whether that——

Q. (Int.) Just turn to the point where you found that P. S.?

A. I don't know whether it is marked on this, I will see; yes, sir; this is 665 plus 36, P. S., and that is here, it is marked.

Q. And you say you went below?

A. Yes, sir.

Q. And found the next stake here.

A. I found yes, I found 65, 64 plus 50, and another stake this side

of that, and then along about probably 200 feet this side is a point where the line runs over a point. I looked back and that was straight as far as I could see in the brush, until we got pretty near it, seems to me, down by a big—I remember that there was a pine tree stood there, and then turned, seemed to turn again, and
676 I didn't go to that.

Q. Well, the stakes that you noticed was how far from the P. S., the first one?

A. There was one 36 feet down the river, and there was one——

Q. Well now, 36 feet down the river; now the next stake that you noticed going down the river from there?

A. The next one was fifty feet from it.

Q. And the next one?

A. I think I found the next one, 664, let me see, yes;—no, I found this, I found one in between there 664 plus 25.

Q. That was 25 feet from the 36?

A. Yes, sir. That was where there was a turning point, or hub.

Q. Turning point or hub?

A. Yes, sir.

Q. And the next one was 25 feet from that?

A. I think they were all in places here, Mr. Wedgwood, as far as I went down.

Q. As far as you went down the road was completely staked?

A. Yes, sir.

Q. Yes, and numbered, ready, and marked out?

A. Yes, sir; the stakes were all there and marked out.

Q. And as far as you went there was no curves on the road?

A. Yes, there was, because I went the other way.

Q. Well, I mean as far as you went that way?

A. I don't know about that below here; I didn't go down as far as that next stake is shown on the profile.

Q. Well, I say, so far as you went and noticed the stakes, the road was completely staked?

A. It was so far as there was tangents on the road.

Q. And if it wasn't a curve, there was no necessity for curves?

A. No, sir.

Q. And so far as you know, that was a location?

677 A. I took it for granted it was a location.

Q. What was your judgment from what you saw there?

A. Especially when I saw the P. S. on the stake.

Q. And then did you go up the stream?

A. Yes, sir; I turned right around and followed it up.

Q And 665, what did you find above that?

A. I think the next one was a plus, 50.

Q. 665 plus 50 feet?

A. No, sir; 14 feet.

Q. And the next was 666?

—. ——.

Q. Next?

A. 666 plus 50.

Q. The next?

A. Didn't find any next, it was in the river.
Q. In the river; and the next?
A. The next one I found was 668 plus 50.
Q. 668 plus 50?
A. Yes, sir.
Q. Well, how far was that from the bank of the river?
A. That was on the bank of the river or three feet from it.
Q. Next?
A. 669.
Q. Next?
A. 669 plus something; right on top of the bank. I couldn't see it on the stake because the figures were gone, but it was a plus.
Q. And the next?
A. I didn't find any more stakes, because it went right over there into the river.
Q. Went over into the river?
A. Went over into the river.
Q. The- you found the road between the stakes as far as you went along up on the line?
A. I found stakes, yes.
Q. Well, as far as you know that was the located line, curves and all?
A. No, sir; as far as I know, it was not.
Q. What do you know, what do you mean by that?
A. Why, I know that at P. S. there was a curve there on the north or south of that line, and it isn't marked on the ground.
Q. All of these stakes were in a perfectly straight line?
678 A. No, sir; they were not.
Q. Well, tell us how they were, Mr. De Moisy?
A. It was straight as far back as I came, from 663 plus, or 664, on the point that I speak of, as far south as I went it was straight from that to 666 plus 50 on the bank of the river, that was a continual straight line, a straight cutting of brush, and staked in a straight line, and then the next stake I found was 668 plus 50 across the river on the bank, and it was an angle line from 666 plus 50 to 668 plus 50. I found 669 was off, made another angle, so I found three different lines, with two angles between them, where there should have been a curve.
Q. Isn't that a usual thing on a curve?
A. No, sir,
Q. What?
A. The usual thing is to put your stakes on the cords of the center line curves, and if you put them a hundred feet apart every stake is on the curve, and if you put them 50 feet apart every stake is on the curve.
Q. Well, if you put them a hundred feet apart and they are on the curve, looking at them on the ground, wouldn't there be an angle between each stake, Mr. De Moisy?
A. Yes, of course there is an angle between each stake, but the only question will be cords of a curve on the ground, and these were not cords of a curve.

Q. Aren't they cords of spiral curves?

A. No, sir; they are not cords of any kind of curves.

Q. They are not cords of any kind of curves. Well, they were not in a straight line——

A. (Int.) I can draw on the board here and show you just what I mean in a minute.

Q. Well, do so.

A. I can show it a great deal better than I could tell it. (Drawing.) That is the way it is on the ground exactly.

Q. This line is straight (indicating)?

679 A. I went back to this line, to that point, that is about 663 plus, or 664 plus something, and the profile indicates that that is on the tangent, and now 66, the one that has got the P. S., is there; these stakes are in place behind it. These stakes are ahead of it on this same line extended on the ground, because this cutting is a straight line clear through there (indicating). Then where we go here there is a stake on the bank and a hub or plug with a tack in it, right there, marked 666 plus 50, and the next stake I found was here on this bank, marked 668 plus 50, and the next stake I found was 669, and it was up in such a peculiar shape that I hunted all around there to find it; and then there is another stake up here marked 669 plus something, and there is no other mark on there, and then it runs right into the water here. Maybe my angle is a little bit sharper, but that is about the relative position of these two lines.

Q. In what way is that stake insufficient to build a line of grade?

A. Well, it isn't on the line where the road would be built, because whenever they begin to build, instead of being in that shape, this line takes a curve like that; that is the way it curves, and there is where the stake should be.

Q. Did you have an instrument to determine whether those were on the line?

A. I didn't have to have an instrument to look straight.

Q. You didn't?

A. No; if I want to have the curves, I would have to have one.

Q. Surveyors ordinarily use an instrument?

A. Yes, but I can tell whether stakes are straight by looking at them.

Q. I know, but not accurately enough to build a railroad by?

A. No; I wouldn't attempt it.

Q. Is it a spiral or sharp curve?

680 A. No, sir; it depends entirely on the kind of spiral; it is increased as it leaves the tangents.

Q. Now, just what the curve of the line would be in there would depend somewhat on the line beyond it, wouldn't it?

A. Yes, sir.

Q. And while perhaps that might not have suited you as just the way to put in that curve there, might it not be that that was a proper, complete, laid-out line?

A. No, sir; it can't be a proper, complete laid-out line by a man who knows what he is doing.

Q. Can't be?

A. No, sir.

Q. Now, Mr. De Moisy, this fill you spoke about above South fork, how much did you estimate that would cost more than the road would if filled up?

A. What?

Q. The fill across.

A. I didn't make the calculation.

Q. Well, approximately?

A. Well, I didn't make the calculation; I could make it if I had time, but I didn't do it.

Q. Well, didn't you give Judge Henderson figures?

A. No, sir; I didn't give it to him in dollars and cents. I told him that I thought the difference in building the road would be about the cost of building that across South fork.

Q. And that would be of course including riprap?

A. I don't think there would be any riprapping in the fill across there.

Q. Didn't think there would be?

A. No, I think not.

Q. Don't South fork come down there?

A. Oh, yes, that is true, that if they build their line there at all they have got to leave an opening for South fork.

Q. Well now, if there would be a reservoir built so as to raise the water up within four or five feet of this road-bed, the water would be beyond that fill, in South fork?

A. Yes, sir; it would be a fill right through a lake.

Q. It would be a fill right through a lake?

A. Yes.

681 Q. And wouldn't that have to be riprapped?

A. Might and might not.

Q. What is your judgment about it?

A. It depends entirely on what you make the fill of.

Q. Well, with what material you could get there?

A. Well, the general—the material you could get to make that fill of would stand without anything else; I guess; most of it would be rock.

Q. The most of the fill that they would get there would be rock of some kind or other?

A. Yes, sir.

Q. So they would be working in rock mostly?

A. Oh, I think there is more rock than there is dirt.

Q. Now, Mr. De Moisy, if the water was raised to a height of 25 feet as suggested by Judge Henderson there, all of the present right of way would be under water, wouldn't it?

A. Sir?

Q. If the water was raised to the height of 25 feet——

A. Oh, I understand your question.

Q. Yes, it would be all under water?

A. Yes, sir; all of this up as far as South fork and probably a little beyond would all be under water, that is, after the road-bed is

built, the line; the ground is not, because some points stick up, but after it would be reduced to grade on this line, it would then be submerged, if the dam was put in.

Q. The elevation would throw that clear up off the right of way as laid out here?

A. In some places it would and others it would not.

Q. Well, the majority of the way?

A. No, I think that they would be within the right of way most of the way.

Mr. HENDERSON:

Q. Well, you mean within a hundred feet of where they are now?

382 A. Oh, yes, until you come to the point here, Mr. Wedgwood, at the south end,—at the west side of South fork.

Mr. WEDGWOOD:

Q. Now, after you leave there, right along this hill, Mr. De Moisy——

A. (Int.) Well, here is where you leave the hill up here. This down here is all in the bottom. All of that across there is in the bottom until you get on this side again.

Q. Until you get on the edge there?

A. Until you get here.

Q. And a large portion of the right of way at least a half a mile in here would be completely submerged, would it not?

A. Let me see, I can tell you about the distance. No, there is about 1,500 feet shown on there that probably would be, that you couldn't keep on the right of way, but the rest of the way you could.

Q. How would it be with the connections down here, the west end of the Ferguson land, and the upper end?

A. Well, at the upper end it would connect all right; the Ferguson end it might not unless you put in a dock there and an extra train.

Q. In your judgment there, there is at least a 1,500 feet of that that would be entirely submerged?

A. This present line—let me make myself clear, this present line as located from Hanging rock clear up to a point six or 700 feet above South fork would be completely submerged if it was built as now plan-ed and that dam put in.

Q. The grade shown by the profile, and that dam put in 25 feet high?

A. Yes, sir; but only from the point just below South fork would it be necessary to go out of the right of way. You asked me the two questions.

Q. Well, there would be how much space in there that would be necessary to go entirely off the right of way?

A. Well, it would be 13 or 1,400 feet as indicated there.

683 Q. There would be at least that?

A. Yes, I should think so, altogether, guessing at the comparative distance.

Q. That is a guess, but you are convinced that it would be at least that?

A. Yes, it would not be out a hundred feet. I can judge that close on the scale.

Redirect examination.

By Mr. HENDERSON:

Q. Now, Mr. De Moisy, that land up there is unsurveyed land, is it, where that would run out to the right of way?

A. I don't know that at all. I see they have the section lines marked on there, but I never have understood that it was surveyed.

Q. The projected lines, don't you understand that that is meant as approximate projections of the section line?

A. Well, I have no right, Judge, to understand anything about it.

Mr. HARKNESS: Well, that is conceded that it is unsurveyed lands anyway.

Mr. HENDERSON: Yes, it is conceded that it is unsurveyed lands; so there is no question about that.

Q. Now, calling your attention to this surveying here: if they run at angles like that, these curves are put in are they when the road is finally laid out, and the stakes set along where the road is to be?

A. The center line of the road, yes, sir.

Q. The center line of the road?

A. Yes, sir; of course all this work has reference to the center line; that profile is made of the center line.

Q. And if you didn't run it out on the ground, but simply go into the office and figure; suppose on the ground they have figured the place where they would depart from the tangent to make the
684 curve, at both sides, and then in the office, if they strike the curve around there on paper, they have no means of knowing on the ground just what they would encounter, have they?

A. Well, they generally take the topography so that they can tell pretty close, but they can't tell accurately without putting a level on the road.

Q. Now, it is often done, isn't it, that they sometimes in the office, run the angles that way?

A. I don't know, Judge; everything is done; there are tricks in all trades but engineers'.

Q. Well, you have just learned, have you, that there are some tricks in that? (Laughing.)

Q. Now, let me see, you said something to Mr. Wedgwood about its running through, its being graded through water up there; that would be where it crosses South fork?

A. About grading, no, he asked me if the dam was put in how much the track would be submerged.

Q. Well, that is the track as it now lays?

A. Yes, sir.

Q. Of course that would be above the present track?

A. Yes, sir.
Q. But building on the upper line there would be no water to encounter until you got to South fork, would there?
A. No, sir.
Q. And there it would be simply——
A. (Int.) There it would be just the same as building across through a lake, because the water would be on both sides of the track.

Adjournment taken until Monday, April 25th, 1898, at 10 a. m.
Monday; resumed session.

Mr. HENDERSON: Now, if the court please, I have got these copies that I was to introduce in place of that record.
685 The COURT: This as the court remembers is a portion of the former record, is it?
Mr. HENDERSON: Yes, of that big record that I had here, that I withdrew.
(Marked "Def'fs' Ex. 9, D. H. R.")
Mr. HENDERSON: That is all, if the court please.
The COURT: The admission of that was passed upon, as the court remembers a few days ago.
Mr. HARKNESS: That is merely a copy of it.
Mr. HENDERSON: Yes, there was no question raised to these, if the court please. This is the proceedings on the appeal.
The COURT: Yes, I remember now.

Testimony for defendants closed.

Rebuttal.

DON R. CORAY, sworn for plaintiff, in rebuttal.

Examined by Mr. WEDGWOOD:

Q. Mr. Coray, are you familiar with Provo canyon?
A. Quite so, yes, sir.
Q. Have you been for a number of years past?
A. I have.
Q. Was you in the spring of '96?
A. Yes, I was up there several times.
Q. Well, was you familiar with the canyon then?
A. Yes, sir.
Q. Was you up Provo canyon in the spring of '96?
A. Yes, sir.
Q. You know where Thayer's house is?
A. Yes, sir.
Q. The county bridge?
A. Yes, sir.
Q. What is sometimes termed Middle rock?
A. I don't know as I know where Middle rock is.
686 Q. You know where Hanging rock is?
A. Yes, sir.

Q. You know where there is a boulder in the middle of the river between the Hanging rock and the bridge?

A. Well, I know there is one in there somewhere, but not exactly its location.

Q. I will ask you if you can tell any particular date that you was up Provo canyon in the spring of '96?

A. I was up there March 30th, and April 13th.

Q. I will ask you if you saw any stakes along the side of the river at that time?

A. I did, see a great many.

Q. Well, I will ask you if you noticed any one stake that was marked with anything on it?

Mr. BAILEY: This seem- rather leading, if the court please.

The COURT: It obviates going to every one of the stakes. Let him however state what he saw there, Mr. Wedgwood; obviate leading as much as possible.

Mr. WEDGWOOD:

Q. Did you see any stakes marked?

A. The most prominent stake that I saw marked was up above the bridge. It was four by four, if I remember right, about three feet high, near the road on the right-hand side.

Mr. HENDERSON: Just a moment; what is this?

Mr. WEDGWOOD: Well, I will find out, Judge.

Mr. HENDERSON: Well, I am entitled to know before——

Mr. WEDGWOOD: I don't know whether we are obliged to explain.

The COURT: Well, I object to it as not being rebuttal.

Argued to the court, by Mr. Wedgwood.

Mr. HENDERSON: If it refers to some stake that has been testified to by our side, why then it is all right.

Mr. WEDGWOOD: Why it does certainly; refers to a stake set on that line run by you.

687 The COURT: Answer the question.

Mr. HENDERSON: Well, we have no objection then.

Mr. WEDGWOOD:

Q. Finish your description of that stake?

A. I have forgotten just where I was.

The COURT: Read the answer.

Answer read by reporter.

A. (Continuing:) Going up the canyon; it is a little above what they used to call Windy point, there, some four or 500 feet, maybe more above the first dugway above the bridge—that is where the old bridge was; I don't know where the new bridge was built.

Mr. WEDGWOOD:

Q. Do you remember how it was marked?

A. Yes, sir; it was marked "top of dam."

Q. Approximately how far above the water level?

A. I should judge some 12 or 15 feet.
Q. And what date did you see that?
A. I saw that on March 30th, '96, and April 13th.
Q. And April 13th?
A. Yes, sir.
Q. You are familiar with the roads in that canyon, Mr. Coray?
A. Yes, sir.
Q. Where does the—on which side of South fork does the road run that goes up South fork, if there is one?
A. After you cross the river?
Q. After you cross Provo river?
A. Going to South fork it goes up on the left-hand side going upstream for a ways.
Q. On the left-hand side?
A. Yes.
Q. Going upstream?
A. That is as I remember it. I haven't been up there for a number of years.
Q. Do you remember what the character of said canyon is, Provo canyon on the south side of the stream from the bridge up to South fork up to an elevation of 40 feet or so?
A. Well, up above the falls a ways it is quite rough.
688 Q. After you turn into South fork what is the character of the west side, that is, on the right-hand side going up?
A. The hills there are smooth, if I remember right.
Q. Well, do you remember what they are?
A. They are quite steep there, gravelly.
Q. Gravelly, after you go into South fork?
A. Yes, sir.
Q. Well, how are they in the side of Provo canyon after you leave the bridge?
A. On which side?
Q. On the south side of Provo canyon?
A. Well, they are rough there, and steep.
Q. Rocky?
A. Yes, sir.
Q. As to being perpendicular at an elevation of forty feet or so, or going up to an elevation of forty feet at Hanging rock how are they?
A. I don't know just what that elevation would be, but so far as you can see from the road on the north side of the river they are very rough and steep.
Q. Steep and rocky?
A. Yes, sir; almost perpendicular.

Cross-examination.

By Mr. HENDERSON:

Q. Mr. Coray, on the south side of the river going up from the bridge up, the walls of the canyon run pretty straight, don't they?
A. Straight up and down, you mean?

Q. No, I mean straight up and down the river?

A. Why, no, there are several curves in there.

Q. Well, but there isn't much curves, there isn't any sharp curves on that side is there?

A. I think there are. There is a fall or two comes down there.

Q. Yes, there is Bridal Veil falls, and there is water trickling down over the stones above in various places along there isn't

689 there?

A. Yes, sir.

Q. But the walls of the canyon substantially as you stand and look up the river they are pretty well aligned, as they go up the river there for quite a ways above the bridge, ain't they?

Q. Well, for some distance, yes.

Q. Yes, now they are standing on a slant; they are not perpendicular, are they?

A. In places they are, as near as a person can tell with his eye.

Q. Well, I will call attention to the exceptions, but as a rule the canyon rises up there on a slant until it gets way up five or six or 700 feet, and then there is a wall of rock that runs straight up, way up at the top, isn't there?

Q. Well, if I remember right, there are two benches along there.

Q. Two benches where?

A. Two straight walls of rock for a little ways above Bridal Veil falls, on the south side.

Q. You think there is on the south side?

A. Yes, sir.

Q. How long since you have been there?

Q. Well, it is about a year and a half since I was up there.

Q. Isn't it true that from Bridal Veil falls up for a long distance, quite a long distance, say up above Standing rock, as a rule way up at the top there are cliffs that go up, and then there is debris from there on a slant down to the river bed?

A. No, that isn't true.

Q. That isn't true where, at what place?

A. Well, if I remember right between the Bridal Veil falls and the next fall above. Well, there are two walls of rock; they are both very nearly perpendicular.

Q. Going clear to the river?

A. Well, as far as you can see for the timber on the river; where the river bed is I don't know.

Q. Where is that as to Bridal Veil falls?

A. Right on above Bridal Veil falls there.

690 Q. What is that?

A. Right on above Bridal Veil falls there.

Q. Right above?

A. Yes.

Q. You don't know anything about where the line on this proposed road is laid along there?

A. No.

Q. You don't know about that; now, going above that place, and

you don't know where this proposed line of road crosses the river, as stated, at all, do you?

A. No.

Q. Going above that for a long distance isn't it true that there are a cliff of rocks at the top and debris that slants down to the river?

A. Above where?

Q. Well, above that bench that you speak of, just above Bridal Veil falls?

A. I don't know just how far it is; it is quite a ways up there before the debris makes any natural slant.

Q. Do you say that there isn't any natural slant right at Bridal Veil falls, and every bit of the way from there up?

A. On the brink of the river, yes.

Q. On the brink, how high above does it extend?

A. Oh, I don't know.

Q. Do you say that there is any place where that debris doesn't extend, except as jutting rocks like Hanging rock, do you say that there is any place where the debris isn't over 300 feet high?

A. Yes.

Q. Where, what point, anywhere along there?

A. Well, at Bridal Veil falls, all along there.

Q. At Hanging rock there is a jutting bit of rock coming up three or 400 feet towards the river?

A. Well, there is a jut of rock there.

Q. When you got above that there is a slant that goes up until you get to the cliffs above?

A. Yes; there is a slant there.

Q. And goes right on up there?

A. Yes.

691 Q. And isn't it true in every other place wherever there is a jutting projection of rock comes out, the debris has simply formed around it and above that jutting projection; that there is debris above it?

A. No; I don't think that is true in all instances up there.

Q. Don't think it is true in all instances?

A. There are a good many rocks there, that come right down to the river.

Q. Come right down from the cliffs above?

A. Yes. Well, there are little breaks along there, just as it is in Bridal Veil falls; Bridal Veil falls in three places.

Q. Yes, falls in three places; how far back is the last fall from the river?

A. I don't know.

Q. Well, isn't it several hundred feet?

A. Maybe a 150 feet along there, I don't know what the height would be.

Q. Do you know any place there where the water strikes within two or 300 feet of the water of the river, water falling down from perpendicular rocks?

A. I think the Guard Quarter spring falls right down there.

Q. What is that?
A. I think the Guard Quarter spring falls right down there.
Q. What spring is that?
A. The Guard Quarter spring.
Q. Where is that?
A. It is below Thayer's on the north side of the river.
Q. Below what?
A. Below Thayer's on the north side of the river.
Q. Well, I am not speaking of the north side of the river; I am speaking of the south side?
A. Well, you asked me about any place in the river, didn't you, Judge?
Q. Well, I say any place, I supposed we were talking about the south side.
A. Well, I find, the way this case is I don't know what you have been talking about.
692 Q. What is that?
A. I say the way this case is I don't know what you have been talking about.
Q. Well, I was talking about the south side; well, no matter; on the south side, do you know of any places the water drops perpendicularly down to the river?
A. Well, that next little fall goes so far as you can see for the timber.
Q. Which little fall?
A. I don't know as it has a name.
Q. Well, the first one above Bridal Veil falls?
A. Yes, above Bridal Veil falls.
Q. Now, Mr. Coray, can you see riding up the valley road, that that is clear across the river on the rocks on the other side, and four or 500 feet above the road?
A. Yes, that is just what you can see.
Q. Yes?
A. Comes right over the rocks down to the river.
Q. Yes, runs over the rocks down to the river, but is there any base there, where the water perpendicularly falls at a distance, that the water of the river bed would extend to over there?
A. Well, it apparently it does at this fall I speak of.
Q. At this fall you speak of apparently it comes down into the river bed?
A. Yes.
Q. Have you been up there since the power plant has built their dam up there?
A. Not, not up that far.
Q. You haven't been up there where that brush was cut there around that place where the dam is, and where the reservoir—not the reservoir, but the dam has been built, from that down to their works?
A. Well, I don't know just where that dam is. I have been there since the brush was cut around Hanging rock.
Q. Well, I mean since that conduit was built, the flume?

A. Yes, since the conduit was built, and I have been there
693 since the brush was cut around this point I speak of, marked "top of dam."

Q. Have you been there since the flume was built?

A. I have been there since part of it was built.

Q. Which part?

A. The upper part.

Q. The upper part; you have been there since that supposed to be the upper part of the flume was built?

A. In '96.

Q. It is true the river runs along there nearest the south bank, isn't it?

A. Well, I don't know whether it is much nearer the south bank than it is the north.

Q. How many times have you been up that canyon?

A. Probably a 150; I couldn't tell exactly.

Q. A 150; and it is very brushy up for a mile or a mile and a half do you say that you can't tell whether the river seems to run nearest to the walls of the canyon on the south or the north side?

A. Well, it — owing to what you call the walls of the canyon; there are precipitous banks there on both sides of the river.

Q. Yes, down near the river?

A. Yes, sir.

Q. You mean where the main formation, the walls of the canyon come down to that gulch, you know what that means, don't you?

A. No, I don't think I do.

Q. Don't think you do know what that means?

A. The main formation, I don't know how much of it is solid under the debris, and how much isn't.

Q. Well, I am not speaking of inside the earth, but I am speaking of the outside where you can see the surface, the contour?

A. Well, along there, Judge, there are great big ledges show themselves out of that debris. I don't know whether they are solid or not.

Q. I am not talking about whether they are solid inside or not, but going up as far as you can see above the bed of the river,
694 going up 500 or 600 feet above that, and on a line, on each side, isn't it true that the walls of the canyon are nearest the river on the south side, nearer than they are on the north side?

A. Those top ledges are, yes.

Q. Yes.

A. Nearer the top of the mountain the ledges are nearer on the south side than they are on the north.

Q. They are along there for two or three miles, they are nearer.

A. The ledges run up there for four or 5,000 feet, I judge, or a thousand feet; those top apparently perpendicular ledges are nearer on the south side than they are on the north side between Hanging rock and the bridge.

Q. Yes, and above Hanging rock, ain't it?

A. Well, I don't think there is much difference, take the average up the canyon above Hanging rock.

Q. You say you saw a stake marked up there, "top of grade"?

A. "Top of dam."
Q. Top of dam?
A. Yes.
Q. And that was March 30th or April 13th?
A. Yes.
Q. That you saw that?
A. I saw it on those two dates.
Q. You say you haven't been there since the dam was built?
A. No, I haven't been up.
Q. You know, don't you, that that is at or near the place where the present dam is?
A. I don't know whether it is or not.
Q. Well, how far was that above the bridge?
A. Oh, I don't know; six or seven hundred feet probably.
Q. Six or 700 feet?
A. I can't describe just where it was.
Q. Well, don't you recollect a big boulder in the center of the river called Middle rock?
A. No, I never saw any mark on any of those rocks up there in the river.
Q. Well, isn't there one more large boulder that before this dam was built that raised up out of the water of the river there
695 three, four or five feet, that is larger than others, in the center of the stream, down about a thousand feet from, or three, or four, five or 600 feet from Hanging rock?
A. Oh, there is a—there are a great many large rocks in the river along there, and I don't know which Middle rock is.
Q. Well, it is about a thousand or 1,200 feet below Hanging rock wasn't it?
A. Yes, further than that.
Q. Further than that?
A. Yes.
Q. And it was above the bridge?
A. It was above the bridge, yes, about six or 700 feet I should judge above the bridge; it is just where the road goes out of the second little flat after it goes over the dugway, from the bridge.
Q. Was the power company's men doing work near Thayer's at that time?
A. Well, when I went up on the 30th I didn't see any of them; it was a very stormy day.
Q. It was a very stormy day the 30th of March and you didn't see any?
A. Yes.
Q. You saw indications of work being done?
A. Well, I saw stakes all the way along the canyon.
Q. No, I mean work, I am talking about grading and digging?
A. Oh, there was brush cut all the way around there.
Q. I am not talking about brush; I am talking about digging.
A. I don't think I saw any digging.
Q. What?
A. I don't think I saw any digging.

Q. Now, on the 13th of April when you went, what kind of a day was that?

A. That was a better day.

Q. That was a better day; did you see any work then?

A. Yes, I saw men all the way around in that country; I didn't know what they were doing.

Q. Well, didn't you take any notice at all of what they were doing? Was they at work?

696 A. They were just going to work. I stopped at Thayer's to dinner and walked along out with them as they were going to work.

Q. Well now, didn't you see the work they were going to do?

A. No.

Q. Why, you stopped at Thayer's, didn't you see anything of the work they were engaged in?

A. Not outside of the cutting brush.

Q. How is that?

A. Not outside of brush; saw where brush had been cut all the way around that country.

Q. Do you know anything about how far from Thayer's they were at work?

A. Well, some of them just went up as far as Ferguson's.

Q. Some went up there?

A. Yes.

Q. Well, where did the most of the men go?

A. I was in the lead of them, if I remember rightly; I don't remember where they stayed.

Q. Well, did you see any indications then of work being done in the way of digging and grading?

A. Where was that?

Q. Well, anywhere along there, near Thayer's, within a half a mile up or down?

A. No, I don't think I did see much digging down there.

Q. Well, did you see any, you say much?

A. I don't remember.

Q. You don't recollect; well, you wouldn't say——

A. (Int.) The ground was all disturbed from their grubbing brush around one place and another.

Q. Yes, but you didn't see that that brush was cut out in a way to indicate a line of flume approaching the river?

A. The brush was cut promiscuously Judge, everywhere, a person couldn't possibly answer as to that.

Q. You couldn't see any place where it seemed to go down towards the river?

A. No.

Q. No, indication; what did it seem to be, clearing away a farm?

697 A. Looked as much like that as anything else.

Q. Looked as much like that as anything else, and that you judged to be the work that was going on there, did you?

A. No, I supposed they were doing something, I didn't know what?

Q. Well, didn't you have any idea now, what they were doing?

A. Oh, I had a kind of an idea, yes.

Q. Now, what was the indication as you saw it going up the canyon, what were they doing?

A. Well, I had the impression, Mr. Nunn had been telling us for a good many years he was going to have a flume there, and I supposed he was going to do it.

Q. Telling you for a good many years?

A. Yes.

Q. Six or seven?

A. Well, I believe the first time was in '94.

Q. The first in '94?

A. Yes.

Q. And you thought they were working at it as you saw the place there?

A. I thought probably they were going to commence work.

Q. Well now, you know don't you Mr. Coray, from what you saw in that canyon, that that was at or near the present place of the present dam?

A. At what, sir?

Q. Or, that is at or near the present site?

A. Where that stake was set?

Q. Where that stake was set?

A. No, I don't think it is.

Q. Don't think it is, which way do you think it is from it?

A. Well, I am judging more from what I have been told.

Q. How is that?

A. I think it is about three or 4,000 feet below where the flume intercepted the river.

Q. Where the flume intersepts the river?

A. Yes.

Q. Well, now, Thayer's is a quite a ways above that, isn't it?

A. Above what?

Q. Above where you saw that stake?

A. Oh, no, it is below.

698 Q. It is below there?

A. Yes.

Q. And do you mean three or 4,000?

A. Or three or 400 feet.

Q. Below where their dam is?

A. Why, three or 4,000 feet.

Q. You think 4,000 feet it would be below?

A. I am guessing part of that. I understood that that first piece of flume was 4,000 feet long, and this stake was near the bottom of it.

Q. This stake was near the bottom of it?

A. Yes.

Q. Near the bottom of the flume?

A. Yes, the lower end of it.

Q. And where did you understand that was running, from there down the river to what place?

A. That what was running?

Q. You say you understood the flume was 4,000 feet long?

A. Yes.

Q. Well, from where and to where?

A. Why, from where this stake was.

Q. You understood that they were fluming upstream from the stake?

A. The flume built in '96 comes down near to where this stake was, and from there on up the canyon.

Q. Yes, but Mr. Coray, I want to ask you if you understood that that flume was being built three or 4,000 feet from that place where you saw that stake up the river?

A. I don't know anything about the flume and the stake, their connection.

Q. Well, did you understand that they were building a flume to a point up the river from that?

A. Yes.

Q. Yes; you think you did?

A. Not at that time; I found out afterwards from my observation.

Q. That you found out afterwards?

A. Yes, sir.

Q. You didn't know anything about when that stake was set there, or what it was set for?

A. I know it was set some time between December 18th, '95 and the 30th of March, '96.

Q. You think that is so?

A. I know it is so.

699 Q. How do you know that it wasn't there before?

A. How is that?

Q. How did you know that it wasn't there before?

A. Because I went to that point some two or three times.

Q. What for?

A. To hold a rod on it.

Q. For what?

A. For Mr. Searle.

Q. What was that?

A. For Mr. Searle.

Q. For Mr. Searle?

A. Yes, sir.

Q. And what was he doing at that time?

A. I don't know what he was doing; he was looking at this rock through an instrument.

Q. Do you say you don't know what Mr. Searle was doing, the man you was holding a rod for?

A. He was looking at this rod through a transit, or I guess it was a level.

Q. Well, you do know that?

A. Yes, I told you that before.

Q. I understood you to say you didn't know what he was doing?
A. No, I told you all I know that he was doing was that he was looking at that road with an instrument.
Q. You know he was making a survey there, don't you?
A. I was holding the rod.
Q. And you was helping him make a survey?
A. Well, I don't think it was a survey; I think he was checking up some bench-marks.
Q. You don't know it was a survey; you think he was checking up some bench-marks?
A. That is what I think.
Q. And when was it that you did that?
A. That was in December, '95.
Q. Now, where were the bench-marks?
A. That was the upper one.
Q. The upper one; how far up, how high up?
A. I mean up the river, upstream.
Q. Upstream, and how high up the stream, what distance?
700 A. It was where I described this stake marked "top of dam;" shall I describe it again?
Q. You was holding that rod on top of that stake for him to check levels from there upstream?
A. No, sir.
Q. To that stake?
A. I didn't say that.
Q. Where was he checking up to now I ask you again?
A. I say that was the top point, and we went down then, downstream.
Q. Oh, you didn't go above there?
A. On the north side of the river.
Q. You didn't go above there?
A. Not at that time.
Q. At that time you did not survey above there?
A. No.
Q. And that was at what time, you say?
A. It was December, '95.
Q. And you held that rod on that stake at that time?
A. Not on that stake, no; on that point.
Q. On that point?
A. Yes.
Q. Was it that exact point?
A. It was just as near as a man would——
Q. Just as near as could be?
A. Could be fixed.
Q. And you didn't discover it at that time?
A. No.
Q. Now, what was he surveying, I have asked you two or three times to just tell me what it was he surveyed?
A. I don't know sir; I can tell you what I think; we were checking up some levels, or bench-barks.
Q. Well, what were these levels that you were checking up?

A. Well, I first set my rod there on that point, and the next time I think was on what they call Windy point, downstream.

Q. On what?

A. On what they call "Windy point," the next was; it was around between Thayer's and the bridge.

Q. Now, Mr. Coray, I didn't ask you that, where you set your rod; I am asking you about what levels it was you were checking up?

A. I don't know what levels it was.

701 Q. What level was it?

A. It was a point that Mr. Suhr started at, a hill there.

Q. How was that?

A. It was a point that Mr. Suhr started at; he took us out and showed us this place.

Q. Now, you was checking up with some levels that was up on the side of the canyon, wasn't you?

A. No, I don't think so.

Q. How was that?

A. We didn't go up on the side of the mountain.

Q. I didn't ask you that; was you checking up the levels up there?

A. No, we came down the canyon.

Q. What higher level was it that you checked up with?

A. I don't think it was a higher level.

Q. Well, you said so a little while ago.

A. I said that we was checking up levels, I mean checking up, not going uphill.

Q. Was that for Nunn at that time?

A. Yes, I think it was.

Q. You think it was for Nunn, have you any doubt about it?

A. Well, my check was signed by Mr. Bailey.

Q. Well—who?

A. Bailey, I think.

Q. By Bailey, that is the, what Bailey was that?

Q. I don't remember the initials.

Q. It wasn't this gentlemen?

A. He wasn't here, the check came from Telluride.

Q. The check came from Telluride; how long did you work there?

A. We was there two nights and two days, I think.

Q. How far did you run up and down the canyon?

A. We went from the point I have described down, I don't know, we didn't chain it, so I don't know just the distance. It is down though somewhere near the upper end of the old Toll Gate flat.

Q. How many times did you go up and down the line?

A. I think we went over it twice.

Q. You ran over it twice?

A. I think so.

Q. Did you know finally what the level was that was estab-

702 lished there?

A. No, I had nothing to do with the figuring.

Q. You had nothing to do with the figuring; you don't know anything about the height; how high a rod did you hold up there?

A. Well, it was a rod with figures on. I think it was fifteen feet high.

Q. It was a sliding——

A. (Int.) All I know about the height is what Mr. Searle said; he said it was one-tenth high, or one-tenth low, something, at that point.

Q. One-tenth what?

A. One-tenth high or one-tenth low at that point.

Q. Was there a slide that you had on that rod?

A. Yes.

Q. Did you raise that up or lower it as he looked through the instrument?

A. I think that we worked that way; that is worked both ways; sometimes they read the rod and sometimes they only read the target, and then the rodman swings it to get the target in line, and reads that himself.

Q. You think at that time you did move the slide up and down at the proper figures?

A. Probably we did.

Q. Do you remember what the figures were at that time to which you lowered it or raised it, at which you adjusted it?

A. No I do not.

Q. Approximately how high was it?

A. Well, I can't form any idea.

Q. As high as your head?

A. Might have been the rod when it is closed up was as high as my head.

Q. Well, I mean the fullest that you adjusted that slide to his looking through the instrument?

A. Oh, well, that would have been adjusted according to where he set his level.

Q. Certainly I know that; but have you any recollection or do you know anything about or have any recollection about
703 how, when you set your rod there you adjusted that slide on that scale?

A. No; I don't remember.

Q. Don't recollect anything about it; that's all.—Oh, did you make any inquiry at that time about the scheme of their plans of their enterprise up there?

A. No, I don't think so.

Q. Didn't make any inquiry?

A. No.

Q. And nobody said anything about it?

A. Oh, there was lots *if* talk went on there, yes.

Q. Well, lots of talk about it, but did you make any inquiry of anybody that was supposed to know?

A. No, sir.

Q. Or did anybody tell you that was supposed to know authoritatively about the scheme of the enterprise?

A. No, I don't think so.
Q. How was that?
A. I don't think anybody addressed any remarks to me. I heard a great deal of talk; they talked half the night there.
Q. Where?
A. There at Thayre's house.
Q. And who was present?
A. L. L. Nunn, P. N. Nunn, Mr. Converse, Mr. Searle, Mr. Cramer and Mr. Suhr.
Q. Yes, now, Mr. Coray, you didn't know after hearing that discussion there between them, anything about what this work was for?
Q. What what was for?
Q. This work, this line that you was running?
A. Oh, I formed an idea, yes.
Q. You formed an idea?
A. Yes.
Q. Well, what idea did you form from that?
A. That it was all preliminary work up to that time.
Q. That it was all preliminary work?
A. Yes, sir.
Q. That is that they were figuring there as to what was best to do?
A. Yes.
Q. Did you hear talk there at that time about a high, big
704 dam up the stream?
A. No.
Q. Not any?
A. No.
Q. Wasn't talked about?
A. No.
Q. In any way?
A. No.
Q. You didn't hear any talk upon that subject?
A. No, sir.
Q. You stayed all night there and heard them talking about it?
A. I didn't hear them talking about any particular dam; they were talking about the advisability of a pipe line down the river instead of that canal.
Q. Was that what was under discussion?
A. That was all that I heard.
Q. That is what was under discussion at that time?
A. Oh, there were a great many things under discussion, and that was one of them.
Q. Well, what else?
A. Well, there was the relative cost of iron pipe, and flume, and canal.
Q. Well, that had reference didn't it to the building of that flume down the river?
A. Down the river, yes.
Q. Yes.
A. Or somewhere in there, I don't know.

Q. Now, was there any discussion there upon any other subject that didn't have relation to that?

A. Yes, they were discussing this new light proposition, I have forgotten what it was.

Q. Was you acting for the railroad company when you ascertained the location of this stake?

A. No, sir.

Q. Were you in their employ at any time?

A. No, sir.

Q. How was that?

A. No, sir.

Q. When did you inform them about it?

A. I don't think that I ever informed them about it.

Q. Don't think that they knew it?

A. I think they were informed by Mr. De Moisy.

705 Q. You think they were informed by Mr. De Moisy?

A. Yes.

Q. Well, did you tell him about it?

A. No, he spoke to me about it up at a place there, Billy Wright's, that same night, the 13th.

Q. The same night of the 13th?

A. Yes.

Q. That was——

A. (Int.) We stayed up there together that night.

Q. You was going up above there; he was going up to do some more work wasn't he as an engineer or surveyor?

A. Yes.

Q. And you went up with him, did you?

A. He went up in a carriage. I went up afterwards on horseback.

Redirect examination.

By Mr. WEDGWOOD:

Q. At this time you were in camp in conversation that Judge Henderson has asked you about, was in December, '95?

A. December '95 at Thayer's.

Q. And you say you saw some men up about the Ferguson place on the 13th; do you know what men they were?

A. I saw Mr. Collier above the Ferguson place.

Q. You saw Mr. Collier?

A. Yes; I think Mr. Searle stopped at the Ferguson place and went up in the brush from there.

Q. And there was men with Mr. Collier was there?

A. Yes.

Q. You could see what they were doing?

A. Well, they were apparently doing some engineering, surveying.

Q. Had surveying instruments with them?

A. Had instruments and chains or tape.

Mr. HENDERSON: Let's see, which date was that in December when he went up?

706 Mr. WEDGWOOD: '95, yes; you brought that out yourself.

Q. Now, I will ask you, Mr. Coray how far approximately Bridal Veil falls is from Hanging rock, if you know, somewhere near?

A. Somewhere about a mile.

Q. So, taking that to — Bridal Veil falls (indicating), Hanging rock, would be something like a mile above it up the canyon?

A. Yes.

Q. Now, I will ask, you, Mr. Coray, Bridal Veil falls comes in pretty near the face of the canyon, doesn't it? It is almost directly —flows down that little canyon, comes down almost straight, does it not (indicating)?

A. Straight, facing the canyon, I think the angle the canyon is on at that point——

Q. (Int.) What I mean is, that Bridal Veil falls comes almost right down straight with the canyon; that is, the little canyon that that is in, is right straight off this way (indicating)?

A. Yes.

Q. Now, Mr. Coray, I will ask you, from a point a few hundred feet or less than that from where Bridal Veil falls, comes into Provo canyon up here, for quite a distance, perhaps half a mile or more, whether or not you know about the practicability of a footman scaling the wall of the canyon?

A. Well, I fell off from there once; it was too difficult for me.

Q. Well why?

A. They are so steep.

Q. They are so steep; now I will ask you if you remember them to describe them to Judge Henderson, the rocky walls of the canyon making a turn to the right, and a canyon coming in, and falls coming down there, up above (indicating)?

A. Which falls do you have reference to, the Bridal Veil Falls or one above?

Q. The one above; I am asking you if you remember above Bridal Veil falls some little distance, I don't remember myself the distance, but perhaps three-quarters of a mile, quite a heavy fall coming

707 off from the mountain?

A. Yes, in the spring or when the water is high, there is quite a fall there.

Q. And that this fall almost faces the north, does it not, or faces the east? It doesn't face straight into the canyon?

A. I don't think it faces the east; it might face the north.

Q. Well, it doesn't come right down to the face of the canyon, it is in a recess itself isn't it?

A. Oh, it is back in a little gulley that is washed out.

Q. Well, that is rock back there, isn't it?

A. That is rock back there as far as you can see.

Q. There is other little falls there, isn't there in the spring of the year, one above and one below.

A. Yes.

Mr. HENDERSON: That is all, Judge, very leading.

Mr. WEDGWOOD: Yes, I know, Judge, I was just patterning after you, Judge.

Mr. HENDERSON: Well, you are a very apt student.

Mr. WEDGWOOD:

Q. Now, supposing that to be the South fork, Mr. Coray there, and that is the Provo river, just indicate on there where the road goes up the South fork, and up Provo canyon.

Mr. HENDERSON: What is the object of that? I object to it as immaterial. I don't understand that. What do you mean, the dirt road?

Mr. WEDGWOOD: I mean the county road.

Mr. HENDERSON: What is the object of that?

Mr. WEDGWOOD: The object is to show that this scheme of yours is unreasonable.

Mr. HENDERSON: Yes, that if the court please, the court has passed upon that. They offered that kind of testimony in their case in chief and it was ruled out, and I object to it now as being incompetent, and immaterial.

708 Q. If the court please, and Judge Henderson please, that statement that we offered that in chief is absolute error. On cross-examination of Mr. P. N. Nunn and Mr. Searle that question came up.

Argued to the court.

The COURT: The evidence evidently goes to that question of the reasonableness of the use of the canyon. You may answer the question.

Mr. HENDERSON: Give us an exception.

Mr. WEDGWOOD:

Q. Just illustrate where the county roads are with reference to that rough diagram showing the river and the South fork, just approximately, just show which side it is.

Mr. HENDERSON: Before proceeding further, with that, I want to make another objection, that it is not redirect examination; that this witness has not been shown to be competent to judge of the reasonableness of the use of this canyon; that so far as he has shown anything; he has shown that he is utterly incompetent to do it, and I object to it upon that ground.

Mr. WEDGWOOD: We don't ask him about the use of the canyon, but the facts.

The COURT: The location, I understand.

Mr. HARKNESS: It isn't with reference to our prior examination, but if there is any question about that we ask leave to recall the witness.

Mr. HENDERSON: Then, if the court please, after the statement of counsel, and in view of the statement of counsel that they did not call him to that, I make the objection substantially that they did

not call him for the purpose of bearing upon the question of the reasonable use of the road.

Mr. HARKNESS: I have made no such statement, Judge. We do call him with reference to the reasonable use of the canyon, but what I said, we wasn't asking him what was a reasonable
709 use of the canyon, but ask him to state the facts, and then let the court judge whether it is reasonable or unreasonable.

The COURT: Answer the question.

Mr. HENDERSON: Give us an exception.

Mr. WEDGWOOD:

Q. Well, that is the South fork there; just show approximately the sides of the canyon, and this is up the stream and this is down.

A. Well the river makes a bend in there.

Q. Well, I don't care anything about that. I just want to know where they are with reference to each other.

A. The road comes up here and makes a turn off; that is the turn the river makes, like that, and the road goes across it here.

Q. Just draw the South fork and the canyon and the river and the road up South fork to suit yourself.

A. South fork comes down—I am not a draftsman, I can't do this very nicely; the road comes to a point like this, the main canyon road runs this way, and the other one crosses the river and up the South fork.

Q. Now, I will ask you, Mr. Coray, from down, from about Bridal Veil falls, well say starting from there or below there, to overcome an obstruction in the river 85 feet high for a road on the north side of the river to go up Spanish Fork canyon——

The COURT: Spanish fork?

Mr. WEDGWOOD:

Q. Or South Fork canyon, what kind of country would it go through, to overcome an 85-foot obstruction at Hanging rock?

A. You can't go up South fork and stay on the north side of the canyon.

Q. You can't go up South fork and stay on the north side of the canyon at 85 feet?

A. No.

Q. Could you at 40 or 35 or 40 feet?

A. South fork is on the south side of the canyon, as I have said.

710 Q. Well, did I say on the north side?

A. Yes.

Q. Well, I meant to say on the south side of the canyon, starting with the road at or near Bridal Veil falls, keeping on the south side of the canyon, and overcoming an obstruction in the river 85 feet high above the water at Hanging rock, what kind of a country would the road on that side of South Fork canyon pass through?

A. About such a canyon as a box canyon would be; in places it would have to be blasted out of solid rock.

Q. In places it would have to be blasted out of solid rock?

A. Make a tunnel in some places.

Q. And in your judgment about how long a distance in that distance would the road have to be blasted out of solid rock?

Mr. HENDERSON: I want it understood, if the court please, that this testimony is all taken under our objection, that the witness is being examined as to expert-opinion matters, without showing any competency, and note my exception to it.

The COURT: That will be understood.

A. To my recollection it would be about a third of the distance.

Q. About a third of the distance, and how far would that be, approximately?

A. 2,000 feet, two or three, to the South fork.

Q. Yes?

A. Oh, that is, about.

Q. Well, starting from anywhere where it is possible to get up over an 85-foot obstruction?

A. A couple or 3,000 feet.

Q. A couple or 3,000 feet?

A. Yes, sir.

Q. It would be solid rock?

A. Yes, sir.

Q. Now, Mr. Coray, is there any other way to get up South fork except to build a road on the south side as I have suggested, or cross over on a bridge, if the water was raised 85 feet high at Hanging rock?

A. Yes; you could cross in a boat.

Q. Well, that's all. Just read the question and answer.

Question and answer read.

711 Q. I will just ask, cross over from the south side on a bridge, would your answer be the same?

A. No, not from the south side.

Q. I mean from the north side?

Mr. HENDERSON: Object to it and ask to have the answer to the other stricken out as being extremely leading.

Mr. WEDGWOOD: Well, the last answer may go out.

The COURT: Let it go out, and obviate leading, asking him leading questions.

Mr. WEDGWOOD: I don't think I have asked him any leading questions about this.

Q. I will ask you with an obstruction raised at Hanging rock 85 feet high backed up, and water backed up to that level up the canyon from that point, what ways or means could be used in the nature of a road for public travel up Provo canyon, and South fork canyon, if you know?

Mr. HENDERSON: Now, I object to that as immaterial and incompetent.

The COURT: Answer the question.

A. Have to build a road on the south side and bridge the water.

Mr. WEDGWOOD:

Q. Build a road on the south side?
A. Yes.
Q. Well, could a——
A. Or go around the water.
Q. Well, could it be done by a road on the south side?
A. That is what I said; you would have to build a road on the south side and bridge.
Q. Or else go up the north side?
A. Or else go up aroung in on the north side, and back.

712 SEYMOUR L. MENDENHALL, sworn for plaintiff in rebuttel.

Examined by Mr. WEDGWOOD:

Q. Mr. Mendenhall are you acquainted with Provo canyon below Hanging rock?
A. Yes, sir.
Q. Did you ever do any work there?
A. Yes, sir.
Q. Who for?
A. For Deal Brothers and Mendenhall.
Q. And did you know who they were working for?
A. I knew who they contracted from.
Q. Who?
A. The Rio Grande Western.
Q. What work did you do?
A. I done grading excavation.
Q. Well, what was the character of the work?
A. Sir?
Q. What was the character of the work?
A. It was cutting and filling, side hill work, and gravel and earth, all kinds of work.
Q. Well, what was the object of it?

Mr. HENDERSON: Wait I object to that. He hasn't shown that — knows what the object was.

Mr. WEDGWOOD:

Q. Well, was it railroad work or not?
A. Yes, sir; I misunderstood; I didn't understand what you was after. It was for the construction of a railroad.
Q. Now, what did you do; what was the character of your work after it was completed, what you did of it, describe it as near as you can?
A. Well, when it was completed, it was built in the form of a grade, fourteen-feet road-bed, what is termed a road-bed 14 feet across in width, and prepared to lay ties on, ready; when I completed the work it was ready for the ties, what I worked on.
Q. What was the value of that work, if you know?
A. Nearly two thousand dollars.

Q. Now, where did you—was you there in the canyon all the time this work was being done?

A. Yes, sir.

713 Q. And what was your relationship to the work?

A. I was foreman.

Q. Where was your camp, if you had a camp?

Q. Our camp was on the north side of the river, where there is a stream of water comes off from the north side, and there is a big rock in the river; at that time it wasn't known, but I think it is the same rock now as they term Middle rock.

Q. Middle rock?

A. There was a large boulder in the stream right even with our camp. It stuck out of the water about seven or eight feet, and that is where our camp was.

Q. Now, how far below Hanging rock, if you know?

A. About 500 feet.

Q. About 500 feet; now I will ask you if you ever saw anybody working at Hanging rock?

A. Yes, sir.

Q. Now, I will ask you if there had been any work done on Hanging rock when you went up there?

A. No, sir.

Q. When was the first work done on Hanging rock, if you know?

A. It was between the 11th and the 25th of July.

Q. Now, what year?

A. '96.

Q. And what year did you do this work yourself?

A. '96.

Q. Now, what were you doing when this work on Hanging rock was commenced?

A. I was grading on the south side about 300, 250 feet above Hanging rock.

Q. 250 feet above Hanging rock?

A. Yes, sir.

Q. In plain view of Hanging rock?

A. Yes, sir.

Q. What is the fact; did they see you there at that time they were working on Hanging rock?

Mr. HENDERSON: I object to that as leading.

The COURT: Read the question.

(Question read.)

Mr. WEDGWOOD:

Q. I withdraw that, what is the fact with reference to your position where you was at work and the point where you say
714 they went to work on Hanging rock, as to you and your workmen being visible at Hanging rock and from there?

A. They could see us all the time from where they was working on Hanging rock.

Q. When did you commence grading on the south side?

A. The eleventh day of July.
Q. How far from Hanging rock?
A. About 250 or possibly 300 feet, as I said before.
Q. Now, when did you say they commenced work on Hanging rock?
A. I said between the 11th and somewhere near the 20th. It was after we started to work and was working on that side; I don't know the exact date they crossed there.
Q. Now, what did they do on Hanging rock?
A. They were picking and shovelling the dirt that lay on the rock down to the rock, throwing it off over the rock into the creek, into the river.
Q. How large a space?
A. Well, the first bench was about 18 by 35.
Q. 18 by 35?
A. Nearly level, and they cleared another bench up along the side, higher up.
Q. How much there do you know?
A. Well, there wasn't a regular bench, but was sloping. They cleared up the side of the rock 25 feet possibly, slanting. It was possibly a foot and a half thick with dirt.
Q. Now, which side of the river was this on?
A. It was on the south side.
Q. Did they do any work on the north side?
A. Yes, sir.
Q. When was that?
A. Oh, it was later on, after they quit the first side.
Q. Now did you see any holes dug between those two rocks, see them digging any holes?
A. At what time?
715 Q. At any time?
A. Yes, sir.
Q. When did you see them?
A. Some time the first of August.
Q. The first of August?
A. Yes, sir.
Q. Now, describe the holes that were dug the first of August, as you say?
A. Well, they dug a hole, it was above Hanging rock on line of the two rocks, about thirty feet; it was about six feet by eight or possibly ten, down into—they had about a foot and a half of water in it, I should suppose it was about five feet deep through.
Q. Now, did you examine that country before they went to work there, did you when you first went to work there did you examine the rock and the country between those two rocks?
A. I was over it all, yes, sir.
Q When you first went in there?
A. Yes, sir.
Q. Now, what if anything was done before you went there at or near that point?

A. The ground had never been disturbed at any place, well, I might say on the rocks, or between the rocks.

Q. Do you know how these folks crossed over the river from the north side to the south side to do this work on Hanging rock?

A. Yes, sir.

Q. How did they cross?

A. On a bridge that I had built.

Q. That you had built?

A. Yes, sir.

Q. Now, what was the state of the water at that time or prior to that time?

A. The water?

Q. Yes.

A. The water was very deep.

Q. Very deep?

A. Yes, sir.

Q. What time did you cease work up there?

A. The 28th of September.

Q. And what were the circumstances surrounding your ceasing work?

A. We were ordered to stop.

Q. Well, was there any difficulty up there between you and the power people, in any way?

A. Yes, sir.

716 Q. When did that occur?

A. That occurred, I am not positive about dates; it ws along the 23rd or '4th or '5th, just before we ceased work.

Q. What was it?

A. Well, we commenced in the morning on Hanging rock, that is the morning of one of these dates, I don't know the exact date, it was after the 20th; we commenced work in the morning right at Hanging rock, and as soon as the power plant was notified we was there to work, they come up and ordered us off.

Q. Well, was there any force or show of force used at all?

A. They ordered us off and we didn't go off.

Q. Well, go on, tell what happened there?

A. Well, the surveyor was there, and was ordered to take the *the* instrument away from the rock or off from the rock—this was an employee—and he said he wouldn't take it off. They threatened to throw it off in the river; so one of the Rio Grande employees took the instrument away. He ordered us off again and we wouldn't go off. He wanted to know if we wanted him to shoot us off. We told him no we didn't exactly want to be shot off, but we wasn't going off until we had to. Well, he said we had to now. I said we wasn't going off until we had to or was made to; he finally come to a little better terms and we worked until about four o'clock in the afternoon; then we got word from the Rio Grande through their attorney to go off without any scrap, if we couldn't stay on without, that to go off, and we went off.

Cross-examination.

By Mr. HENDERSON:

Q. Now, Mr. Mendenhall, you commenced grading on the north side, didn't you; you commenced on the north side of the river, didn't you?

A. Yes, sir.

717 Q. And what did you make there?

A. We started to build a grade.

Q. You started to build a grade; well, did you build a grade there?

A. Never completed any.

Q. Never completed it; it is right there just a little above Hanging rock, isn't it?

A. Yes, sir.

Q. And it is almost directly opposite the work you did on the other side, isn't it?

A. Yes, sir.

Q. Did you do any other grading on that line of railroad than these two little pieces?

A. Yes, sir.

Q. Where?

A. Above South fork.

Q. Above South fork?

A. Yes, sir.

Q. How far above this place was that?

A. Above Hanging rock?

Q. Yes, how far above Hanging rock was that?

A. About 5,000 and—something over 5,000 feet.

Q. How much work did you do up there?

A. We did about, we completed about between 5 and 700 feet of grade.

Q. That was along through what was known as the Ferguson land, was it?

A. Yes, sir.

Q. And how much of a fill was that?

A. No, sir; I think this was above the Ferguson land.

Q. Above the Ferguson land; how much of a fill was that?

A. It was a cut.

Q. Oh, it was a cut; how much of a cut was it?

A. 19 feet was the deepest on the upper side.

Q. On the upper side, and nothing on the lower side?

A. Yes, sir.

Q. How much on the lower side?

A. Oh, it varied; some places it was nothing, and some places it was a through cut, nine feet on the lower side.

718 Q. Isn't it true that as a rule that along that, was simply cutting on the upper side and filling on the lower side?

A. Yes.

Q. It was simply building right along on a shelf there, by cutting it on the upper side and putting it down on the down side?

A. That is as a rule the way they build railroads.
Q. Yes, I understand, if they have a side hill?
A. Yes, sir.
Q. Now, how much of it was a cut on both sides?
A. About—there is 500 feet of it.
Q. 500 feet of it?
A. Yes, sir.
Q. Do you know how much the aggregate excavation in that work was?
A. In yards?
Q. Yes.
A. No, sir; I can get it.
Q. How many days' work did it take?
A. I can give you that in a half-hour.
Q. Well, you can give it now?
A. I have got the time in my book, but I don't know the days' work that was put on.
Q. Just let me know about that afterwards if you can't give it now. And then you skipped from there clear down to this place down below, or did you do that first or last?
A. Did that last.
Q. And then you went up there, after you was driven off down below you went up there?
A. No, sir; we wasn't driven off from below when we went up above.
Q. Well, I understood you did that after you did this work below?
A. We did that after we did the grading below.
Q. Well, what other work did you do below?
A. We was working above when we was driven off the Hanging rock.
Q. Oh, you was working above when you was driven off there?
A. Yea, sir.
Q. You had two gangs?
A. We had men enough——
Q. Well, were you working in two places at the same time?
A. No, sir; we was the day we was down to Hanging rock,
719 but we didn't last long there.
Q. Oh, you went back and forth in those two places and did the work at the same time?
A. One day.
Q. One day?
A. Yes, sir.
Q. Explain to me how that was?
A. All right, I will explain to you; we did the work at Hanging rock, and completed it as far as we had it under headway to Mr. Ferguson's land. Then we moved above Mr. Ferguson's land and commenced work again right immediately above his land.
Q. Well, you say you finished it at Hanging rock?
A. Finished the work immediately above Hanging rock where we commenced work.

Q. And did you finish it clear up to Ferguson's land?
A. Yes, sir.
Q. And how long a road-bed did you finish there for grade?
A. I think I said eight or 900 feet, I didn't know exactly.
Q. Was there any place where there was a cut on both sides?
A. No, sir.
Q. No, that was just simply cutting into the bank there, there to make a little shelf there wide enough for a road-bed, was it?
A. Well, you can call it a shelf, we cut into the side hill in there. Our highest depth was seven feet in solid rock.
Q. In solid rock?
A. Yes, sir.
Q. Did you do blasting?
A. Yes, sir.
Q. How much of it did you blast?
A. We blasted that immediately above Hanging rock.
Q. As you got to Hanging rock you encountered hard rock, didn't you, on that?
A. The piece we did above Hanging rock was solid rock.
Q. All the piece, and you blasted that?
A. Yes, sir.
Q. And how long was you engaged in that work?
720 A. I think about thirty days.
Q. Thirty days, with how many men?
A. All the way from 11 to 21.
Q. And do you know whether, now outside of these two little pieces of work up there, was there any other work done on that road?
A. I have told you about three pieces.
Q. Well, the three pieces, do you say that the piece on the north side is on the road?
A. Do I?
Q. Yes.
A. They are not on the same road, no, sir.
Q. They are not on the same road; well, I am talking about a railroad on the south side of the canyon.
A. Yes, sir.
Q. How many days of work was done on that?
A. I don't know.
Q. Now, those are the ones I am talking about, the other ain't on that road, is it?
A. No, sir.
Q. Has there been any other grading done on that road, or was there?
A. Which road?
Q. On that railroad?
A. And which side?
Q. Well, I mean the line of railroad as it was to run finally; you understood, didn't you, that the road on the north side was abandoned?
A. Yes, sir.

Q. Well, then, when it was abandoned it was not part of the road, was it?

A. No, sir.

Q. Now, I ask you if there was any other work than these two pieces over across there on the south side that you have described, was there any other work done on that railroad?

A. No, sir.

Q. No; not from Provo clear up there, so far as you know?

A. Not that I know of.

Q. Never seen any or heard of any?

A. No, sir.

Q. Do you know why it was that you was set to work upon these two particular pieces of ground there?

A. No, sir.

Q. Wasn't you told when you went to work that you was being put in there for the purpose of bringing on a contention be-
721 tween them and the power people so as to give rise to a lawsuit?

A. Railroad people generally tells you where to go to work——

Q. I didn't ask you what they usually tells me, but I ask you what you understood?

A. They told me to go to work at these particular places.

Q. Did you understand the reason for going to work there?

A. No, sir.

Q. You didn't understand it at all?

A. No, sir.

Q. Didn't they inform you that you would probably have to stop in a short time?

A. Didn't mention any time. We was obliged to stop when they ordered us to stop.

Q. Well, you was obliged to stop when they ordered you to stop?

A. Yes, sir.

Q. That was an express stipulation, was it?

A. Yes, sir—no that was just an understanding; no stipulation with me.

Q. Well, I know it was an understanding between you and them, that is true, wasn't it; it was an understanding between you and them?

A. Not particularly so with me.

Q. Well I mean your company?

A. I am not speaking for that company. The understanding that I got from no official was we was to stop whenever we were ordered.

Q. Well, I say that was an express understanding between you and the railroad company, wasn't it?

A. Well now, whether you call it an express understanding, I got it from the mere offhand talk.

Q. Well, from the people that employed you, didn't you?

A. Yes.

Q. And you got the same information didn't you, that you would probably be stopped in a short time?

A. No, sir.
Q. Well, did they tell you that if you was not stopped that they was going to continue the work?
722 A. No, I don't know as they told me that.
Q. Well, did they tell you anything about what the conditions was upon which you would probably be permitted to go on and do the work?
A. No, sir.
Q. You didn't know anything about that?
A. No, sir.
Q. They just simply set you to work there with the idea that you should stop at any time?
A. Yes, sir.
Q. In other words there was no contract made to you for any definite and particular amount of work, was there?
A. I didn't do the contracting.
Q. Well didn't you know what your contract was?
A. I didn't have any.
Q. Did you ever see it?
A. No, sir.
Q. I understood you to say you went to work under a contract?
A. Deal Brothers & Mendenhall had a contract.
Q. Deal Brothers & Mendenhall?
A. Yes, sir.
Q. Well, you wasn't one of the firm?
A. No, sir.
Q. You didn't know what that contract was?
A. No, sir.
Q. You was informed then by Deal Brothers & Mendenhall that it was subject to a stop at any minute?
A. Yes, sir.
Q. That is correct, is it?
A. Yes, sir.
Q. And you went up there and commenced this work; you say they can see from Hanging rock?
A. Yes, sir.
Q. Didn't you know at that time that you was put to work in there because the railroad knew that that was claimed as a roadbed, or as the bed of a reservoir, for the purpose of bringing on this contest?
A. No, sir.
Q. You didn't know that?
A. No, sir.
Q. That wasn't disclosed to you at all?
A. No, sir.
Q. So you went to work there in good faith to build a railroad?
A. Yes, sir.
723 Q. And without the understanding that it was for the purpose of bringing on a lawsuit; that is true, is it?
A. That I went without the understanding?

Q. You went to work there in perfect good faith to build a railroad?

A. Yes, sir.

Q. And without any knowledge that you was put to work there for the mere purpose upon trespassing upon the claim of somebody else, for the purpose of raising a lawsuit about it?

A. Yes, sir.

Q. You didn't know it?

A. I did not know it.

Q. Had no intimation of it?

A. No, sir.

Q. You did not know that you was being run against this other outfit for the purpose of making a contention about it?

Mr. HARKNESS: Well, I think I will object to that, as——

Mr. HENDERSON: As what?

Mr. HARKNESS: Just stating an argument to the witness, and asking if that argument is not correct.

Mr. HENDERSON: Yes, that is what I am doing. It is cross-examination.

The COURT: Read the question. (Question read.) He can answer if he knows.

Mr. HENDERSON:

Q. Now, do you say there had not been any work done on Hanging rock before that time?

A. Yes, sir.

Q. How do you know that?

A. I was there.

Q. Well, you was there; you mean while you was there?

A. Yes, sir.

Q. Well now, you don't mean to say that there may not have been work done on Hanging rock before that, before you was there at all?

A. There was no ground disturbed and no indications.

Q. I am not talking about ground. Hanging rock towards the bottom is a projection of rock that comes right out of the bank, ain't it?

724 A. It is a solid projection of rock, yes, sir.

Q. That comes right out of the bank?

A. Yes, sir.

Q. And extends out in that way some little distance towards the river?

A. Yes, sir.

Q. It is about 60 or 80 feet high, isn't it?

A. No, sir.

Q. Well, on the north side it is, isn't it?

A. It is by the time you get to the top of it.

Q. How is that?

A. It is by the time you follow it up the hill far enough.

Q. Well, isn't the first shelf about 60 feet high?

A. No, sir.
Q. How high is it?
A. It isn't over eighteen.
Q. Not over eighteen, the first shelf of Hanging rock?
A. Yes, sir.
Q. Is that your judgment?
A. Yes, sir.
Q. On the north side?
A. The north side?
Q. I changed over; I said on the north side?
A. It is about 25 feet.
Q. 25 feet the first shelf?
A. Yes, sir.
Q. There is another shelf immediately above that, isn't there?
A. Yes, sir.
Q. The third shelf—the first shelf and then another above?
A. Yes, sir.
Q. And that is sixty feet high, isn't it?
A. I should judge it was.
Q. Yes, a full sixty feet high; now on the south side the first shelf there isn't as high, is it?
A. No, sir.
Q. No, but it raises up and finally goes back into the bank?
A. Yes, sir.
Q. Now, above there where it dissap-cars into the bank, there is a slant that goes back up (illustrating)?
A. Yes, sir.
Q. It is a projection of rock that comes right out of the bank
725 and comes right out of the drift on that side of the bank?
A. Yes, sir.
Q. And slants off back above it, and on all sides of it; that is true, isn't it?
A. Yes, sir.
Q. Now, do you mean to say that on the face of this Hanging rock that there had not been any work done there at all?
A. Yes, sir.
Q. You would know if there had been, if parts of that Hanging rock had been knocked off on the side, and crumbled away, or pounded off, for the purpose of ascertaining where it was solid rock; do you think you would have noticed it, suppose it had been done the winter before, couldn't it have been done?
A. If very much had been taken off I could have seen it.
Q. If very much; isn't it true that the face where it projects out there has been worn off and that there is a good deal of the soft rock from it laying all around there?
A. No, sir.
Q. Isn't that true?
A. No, sir.
Q. Isn't it true that that was true on both sides? In a state of nature, isn't it so?
A. It naturally decays.

Q. Yes, naturally decays?

A. But it is in the form of earth after it decays.

Q. Well, isn't it true of all the rock there and in all these mountains where they stand out in abutments like that, that you find around them evidence of that, that there are places that they come off from it, drop down there?

A. Yes, sir.

Q. Float as they call it from the rock?

A. Yes, sir.

Q. Now, do you mean to say that if somebody had worked there the winter before and the fall before and had pounded off the outside scales there, broken it away so as to determine how solid it was, that you could have discovered it when you went there that spring?

A. If they had taken a little shoeing hammer possibly and may have tapped the top of it, possibly I couldn't have detected it.

726 Q. Well, would it make any difference whether it was a shoeing hammer or what the size of the hammer was?

A. Yes, sir.

Q. You saw big boulders or pieces of that rock laying all around the sides of it, didn't you?

A. No, sir.

Q. Didn't see anything of that kind at all; there is a lower shelf or bench of this rock, isn't there?

A. Which side?

Q. On the south side?

A. There is a low bench or shelf down near the water.

Q. Down near the water?

A. Yes, sir.

Q. And that was a quite a level bench, wasn't it?

A. Yes, sir.

Q. It extended up there for some little ways, back?

A. Yes.

Q. And presented the appearance of a smooth shelf?

A. Yes.

Q. That is true, that was true when you first saw it, wasn't it?

A. Yes, sir.

Q. That was true as you went over there?

A. Yes, sir.

Q. Before you went over there, when you first went over there and commenced work, that was true, wasn't it?

A. Yes, sir.

Q. About how wide was that shelf running back, now how high, I mean how wide was it from the bank out to the front edge next to the water?

A. Oh, 25 or 30 feet.

Q. 25 or 30 feet; and how long was it up and down the river?

A. About 18 feet.

Q. About 18 feet; I want to ask you if you don't know, and if that rock did not bear the appearance at that time that during the *the* last year that shelf had been cleared off, and had been, the upper scales of it, had been taken off and made level in that way?

A. It had not.
Q. It had not?
A. No.
Q. You think you are able to swear to that?
A. Not from the judgment of the ground not being disturbed.
727 Q. This is your judgment; well, that was all rock on top, wasn't it?
A. Wasn't at first.
Q. Wasn't at first?
A. No, sir.
Q. What was on top of there?
A. It was earth, decayed matter like forms on rock that is level off of a steep side hill that comes off from the mountain.
Q. Wasn't there an excavation on the upper side of that where it went back into the debris, wasn't there a place along the edge of that rock where the original formation had been crumbled down there?
A. Not at the time I went there.
Q. Not at the time you went there; you saw stakes set along in there, didn't you?
A. No, sir.
Q. You didn't see any stakes set there at all?
A. Not on the rock.
Q. Well, I don't mean on the rock; I mean around there near the rock?
A. Well, how near?
Q. Well, within 30, 40 or 50 feet of the rock?
A. No, sir.
Q. Did you see any up above?
A. Yes, sir.
Q. How high up above?
A. About 90 feet from the water surface I should suppose.
Q. About 90 feet from the water surface?
A. Yes, sir.
Q. You understood when you went up there that that was where the power company proposed to build a dam?
A. Yes, sir.
Q. That you did understand?
A. Yes, sir.
Q. But you commenced work there?
A. Yes, sir.
Q. And didn't you connect that with the idea of having to quit work perhaps at some uncertain time?
A. I didn't know anything about it.
Q. Didn't know anything about it; but you did know that that was the site of the proposed dam on the part of the power plant?
A. Yes, sir.
728 Q. How long had you known that before you commenced work there?

A. I knew they were going to build a power dam, or heard a good deal of talk about it before I went there?

Q. Before you went there, that had been talked in this community a good deal for a year, before, hadn't it?

A. Oh, I don't know how long.

Q. Well, approximately a year; I didn't suppose you knew exactly how long, but approximately for a year?

A. No, I didn't know anything about it that long.

Q. Well, how long?

A. Well, two or three months.

Q. For two or three months before you went up there you had understood it; well, had you never heard before that time of any operations in the canyon on the part of the power company?

A. Oh, just newspaper talk.

Q. Just newspaper talk; you knew nothing else about it. Let's see where did you live?

A. I live in Springville.

Q. You lived in Springville; you just knew some newspaper talk about it?

A. Yes, sir.,

Q. You knew nothing of the facts at all, but for two or three months you had known that they were proposing to build a dam there at Hanging rock?

A. Didn't know the point at that time, from the papers.

Q. Oh, yes, you didn't know the particular point; well you say that you had information that you got two or three months before that also from the newspapers?

A. Yes, sir.

Q. And nothing else?

A. That is all.

Q. And didn't you get any other information than that up to the time that you commenced this work?

A. No, sir.

Q. That was all?

A. That was all.

Q. And it was from the papers that you had got the idea that there was to be a dam built there some place?

A. Yes, sir.

729 Q. Now, when you went up there you have told me that you knew and understood that at Hanging rock was the side of the proposed dam?

A. Yes, sir.

Q. Now, I ask you again when you first got that understanding?

A. After I got in the canyon.

Q. After you got in the canyon?

A. Yes, sir.

Q. But before you got up to the work?

A. I was to the work then.

Q. Was at the work; well, when you first got there then you learned that fact?

A. I saw the men working on the — in the canyon, and I got the

understanding that that is where they was going to build a dam there.

Q. Yes, there at Standing rock?

A. Yes, sir.

Q. Now, I say then you understood that when you first went there that that was the site of the proposed dam?

A. Yes, sir.

Q. Now did you take any notice of the rock, Hanging rock on the north side when you went up there?

A. Yes, sir.

Q. Had there been any work done around there?

A. Not that I noticed.

Q. Not that you noticed; well, didn't you take any notice of it?

A. Yes, sir.

Q. Well, didn't you notice that there had been on that side, didn't you see the plain marks of where they had been chipping the rock?

A. No, sir.

Q. Didn't notice that — all?

A. No.

Q. Did you look for it?

A. No, I didn't notice for chipping rock; I noticed the canyon there and rock.

Q. You had no occasion to come in contact with it at all?

A. Yes, I was right by it, and on it.

Q. You was right by it; was you on top of it?

A. Yes, sir.

Q. You went right up on top of it?

A. Yes, sir.

730 Q. Did you notice any preparations there at all, like work had been done on it?

A. Not when I first went there.

Q. Not when you first went there?

A. No, sir.

Q. Did you notice along the side—how high up did you go?

A. I went up the height of, oh, I don't know, 30 or 40 feet. I was on the first bench.

Q. You was up on the first projection; well that I understood you to say you thought was 25 or 30 feet high?

A. Yes, sir.

Q. You was up on that?

A. Yes, sir.

Q. You wasn't up above that?

A. No, sir.

Q. You wasn't up where a sixty-foot level would have come?

A. I was not on the rock, but on the side hill immediately behind it.

Q. Well, immediately behind it, do you mean right in range of it, or up the stream further?

A. I mean right below the rock on the north side, up on the side hill. I was up there later on on the 60-foot level.

Q. Yes, later on, but I mean at the time you first went up there?
A. No, sir.
Q. How long was it after that before you was up there?
A. I don't know the exact date.
Q. You don't know; well was it some time?
A. Some time the latter part of July.
Q. And how far from the line of Hanging rock was it?
A. About a 150 feet.
Q. 150 feet; what was you up there for?
A. The Telluride Power men were working on a ditch towards Hanging rock, that had not reached there yet.
Q. Towards Hanging rock?
A. Yes, sir.
Q. And you went up there for what purpose, and special purpose?
A. Just up where they were at work.
731 Q. And that you think was up on the 60-foot level?
A. I know it was.
Q. By the way, they were at work then on the sixty-foot ditch level?
A. In the latter part of July.
Q. In the latter part of July?
A. Yes, sir.
Q. Had you seen them there before?
A. I had seen 'em down the canyon lower.
Q. Down the canyon lower, but on the same line of ditch?
A. Yes, sir.
Q. You saw them there when you first went up, didn't you?
A. Yes, sir.
Q. Saw them at that level at work on that when you first went up there. That is all.

SAMUEL NORRIS, called, in rebuttal.

Examined by Mr. WEDGWOOD:

Q. Mr. Norris, when did you go up Provo canyon to work?
A. July the 1st.
Q. I understood that you went to work on the south side?
A. Yes, sir.
Q. Did you see any other people at work in the canyon at that time excepting your own people?
A. I saw the power company's men at work on the flume line, I believe.
Q. And with reference to Hanging rock did you see any work done there?
A. No, sir.
Q. Well, after that time did you see any work done on or near Hanging rock?
A. Yes, sir.
Q. What was it and when was it?
A. The first work I saw done was in the bottom between
732 the two rocks. After we had abandoned the line on the north side they went to work in the barrow pit of the abandoned

bank, and extended the barrow pit down towards the river with the intention of making a channel change at the time.

Mr. HENDERSON:

Q. Who did that, I didn't understand?
A. The power company's men.

Mr. HENDERSON: Well, I object.
The COURT: At to their intentions. What he did. He don't know what their intentions were.
Mr. HARKNESS: We consent that that may be stricken out as to their intentions.

Q. I want to know what they did?
A. I am trying to tell you what they did. They dug a channel change, I suppose.
Mr. WEDGWOOD: Well just leave that out; as to what they did do?
A. And dug some pit holes right in this barrow pit, I don't know just how many holes there were, but I know they done several.
Q. Well, how long was that after you first went there?
A. It was some time after July the 11th after our men went over on the south side; after they got through with that work then went over on the Hanging rock and made a large excavation there.
Q. Well, what did they do, tell what you saw them doing there?
A. I saw them clearing the earth and loose material off from the solid rock.
Q. Which side of the river?
A. The south side.
Q. Now, when did you first go onto Hanging rock, to the best of your recollection?
A. I think I was on the rock on July 3rd, but I am not certain, but I know I was on the rock July the 6th, 5th or 6th.
Q. Now, you may state what if any the indications were on or about the rock to show manual labor, manual work on it at that time?
A. I didn't see any indications of any work at all.
733 Q. Nothing to attract the eye?
A. Sir?
Q. Nothing to attract the eye?
A. No, sir.
Q. Any disturbance of the ground?
A. No, sir.
Q. Now, were you there when the work stopped?
A. Yes, sir.
Q. And what was you doing at that time?
A. You mean at the time we stopped work?
Q. Yes?
A. At the Hanging rock?
Q. Yes?
A. Making an excavation right next to the Hanging rock in the earth.

Q. Well, what was the excavation, grade or what?
A. It was for a grade, railroad grade.
Q. For a railroad grade, and what were the circumstances of your stopping?
A. We went to work in the morning, and shortly after Mr. Cramer came up and ordered us to stop, which I refused to do, and we had considerable talking over the matter, and I told him I would stop work there when I was compelled to do so in some legal manner. He wanted to know what I considered a legal matter, or manner, and I told him that I preferred to have some papers served on me, or something to that effect.
Q. Well, was there any threats or offer of violence at all?
A. Well, he wanted to know if I considered——
Q. Never mind about that; make it short; was there any threats or offers of violence to you?
A. He asked me if I considered the use of a shotgun a legal manner, or something to that effect; some talk about a shotgun.
Q. Well, Mr. Norris, when the power plant people went on to the rock there, what did they do, what was the first that they did there?
A. The first on the rock, the first work was to make that excavation.
Q. Well, what was the character of it, describe it?
A. Well, it was removing the earth and loose material off
734 from the *the* top of the solid rock.
Q. And about how much did they remove?
A. Well, covering a piece about sixty feet, and average width of 25 feet probably.
Q. And that was on the south side?
A. Yes, sir.
Q. And how was it with reference to the river, down low or up high?
A. It was about 15 or 20 feet, between that and the top of the rock, and just carried on.
Q. Well, what was the next?
A. That was all the work I saw there.
Q. All that you saw?
A. Yes, sir.
Q. Now, how did they get over there, do you know?
A. Why, our contractor built a bridge to get over to his work, and they crossed on that bridge, I think.
Q. What was the character of the river at that time, as to being impass*i*ble without a bridge?
A. Oh, you would have to wade to get across.
Q. Have to wade to get across?
A. Yes, sir.
Q. Did you see any work on the north side?
A. No, sir; I never saw any work that was done.
Q. Never saw any work done?
A. No, sir.
Q. You didn't see—did you see pit holes dug?
A. I believe I saw one or two pit holes dug, I don't know just

how many. I know that there was a pit hole dug in our barrow pit, and I think another one some other place.

Q. What kind of ground was it in, did you examine it?

A. No, not particularly; it was earth.

Q. It was earth?

A. Yes, sir.

Q. Lome or what kind of earth?

A. I think it was lome, at that time.

Q. How about the water, did the water seep into it?

A. Yes, sir.

735 Q. How near the surface?

A. The surface of the pit?

Q. The surface of the ground?

A. It was about a foot and a half.

Q. Came up within about a foot and a half of the surface of the ground?

A. Yes, sir.

Q. Now, I will ask you, Mr. Norris, if you are familiar with station 665 plus 36?

A. Yes, sir.

Q. Plus 5?

A. Yes, sir.

Q. Station 666?

A. Yes, sir.

Q. Plus 35—or plus 50?

A. Yes, sir.

Q. And 668 plus 50?

A. Yes, sir.

Q. And above that still?

A. Yes, sir.

Q. I will ask you if you have examined the ground where those sections are?

A. Yes, sir.

Q. When did you do so?

A. Yesterday.

Q. Now, I will ask you whether that examination was made with instruments or not?

A. Yes, sir.

Q. Now, from 665 plus 36 and 666, I will ask you whether or not 666 is on the tangent?

A. No, sir.

Q. Did you find—or what did you find at station 665 plus 36?

A. I don't understand the question.

Q. What did you find at station 665 plus 36?

Q. Found a stake and a hub.

Q. Well, what was on the stake if anything?

A. It was marked "P. S. 10 15 to the right."

Q. Now, what does that 10–15 to the right mean, P. S. 10 15 to the right mean?

A. It means point of spiral, the end, or beginning of the spiral curve, and the degree of curve or the amount it turns is increased

every 15 feet, and that is the term used to distinguish that spirrel from another spirrel; each 15 feet is a certain curve, but it
736 keeps increasing until it gets onto the regular curve.

Q. Now, how much did you find 666 off from the tangent?

A. Seven-tenths of a foot.

Q. Now, what is the fact as to whether that would be on the spirrel, 10 15 or not?

A. That would be on the spirrel.

Q. Now, going to 664 plus 50, what did you find there?

Q. Found a stake laying on the ground; it was not in its right position.

Q. Now, I will ask you if you found that place where that stake was?

A. We found a hole where the stake ought *ought* to have been.

Q. Well, describe that hole, what was the character, whether the stake had been pushed over, or how it was?

A. No, it looked as though the stake had been pulled up.

Q. Well, what is the fact as to whether you found whether the stake fitted the hole?

A. It did.

Mr. HENDERSON: Let me understand; do I understand that he found that stake out of the ground?

Mr. WEDGWOOD: Found it lying on the ground out of the hole.

Q. Now, what is the fact as to whether or not that hole was on the *spirrel*, 10 15?

A. It was.

Q. Now, going up to 668 plus 50, did you find a stake there?

Mr. HENDERSON: Just a moment, let me understand, Mr. Wedgwood, I don't understand these figures over here. Which stake is it that he says was up?

Mr. WEDGWOOD: 666 plus 50.

Mr. HENDERSON: Is that it right there?

A. Yes, sir.

Mr. WEDGWOOD:

Q. Do you say you found 668 plus 50?

A. Yes, sir.

Q. And what did you find beyond that, from there up?

A. Found station 669 and station 670.

Q. Now, was there any stake between 668 plus 50 and 669?

A. No, sir.

737 Q. Then I will ask you where 670 is with reference to the ground from 669 in elevation?

A. Why, it is somewhat lower; it is on the other side of a rocky ridge, at the bottom of the ridge.

Q. Can 670 be seen from 668?

A. No, sir.

Q. Then—or I will ask you whether from 668 plus 50 going up there is three stakes in view, counting 668 plus 50?

A. No, sir.

Q. Now, I will ask you if at 666 plus 50 if to the left you found any mark or hub?
A. I found a hub on the tangent at 668 plus 50 and $\frac{5}{10}$.

Mr. HENDERSON:

Q. Now, on 666 plus 50 found a stake on the tangent?
A. A hub of a stake.

Mr. WEDGWOOD:

Q. Yes, I was going to get that: what do you mean by a hub?
A. I mean a short stake driven nearly to the surface of the ground, usually to the surface of the ground, with a tack in it for a transit point.
Q. For a transit point, now I will ask you if those stations and the intermediate stations as they were on the ground from 665 plus 36 to 669 thoroughly indicated on the ground a spiral curve?
A. Yes, sir.
Q. And of what radius of spiral?
A. Well, there isn't any radius.
Q. Well, the 10 15?
A. 10 15, yes, sir.
Q. Is represented by the point of the spiral mark?
A. Yes, sir.
Q. Was that laid out practically for the building of a railroad?
A. Yes, sir.
Q. The spiral: now I will ask you to continue the tangent.
A. (Drawing same on board.)
Q Now continue the other one; well, what I mean here is
738 to continue the rest of the tangent.
A. Well, I will have to draw the rest of the curve.
Q. Well, I would rather you wouldn't do that. Now, I will ask you if you know what that hub that 666 plus 50.5 was put there for, with the tack in it?

Mr. HENDERSON: Well, what it was put there for?
Mr. WEDGWOOD: Yes, that is, what part it plays in these lines which are represented on the board, if any?

A. It was necessary to fit this tangent that extends up here some distance to intersect it, with this other tangent so as to be able to figure our curve, to run our curve, and to do so we had to cross an arm of the river that runs in here something like this, across this line, and if I remember right there is another stream of water comes in here somehow, or there, and I to see this point we set a point here 50.5 to be able to see this intersection up here so as to figure our curve.
Q. That is, that you couldn't see the intersection from further down on your tangent here as well as you could from here, is that it?
A. Well, we probably could have seen it, but our chainmen ran up there and they thought well, this is a good place to make a point to continue the line on.

Q. Now, I will ask you if that way of doing is the usual, practical approved method?

A. That is the usual way of running a curve.

Mr. HENDERSON: Let's see, is that the one you said was out of its hole in the ground?

A. The stake that is marked 666 plus 50.

Mr. HARKNESS: The one on the spirrel was out of its hole.

A. The stake should have been here.

Mr. HENDERSON: Well, I thought that 666 plus 50 was on the curve?

A. The station is, the stake is, but we found a plug set on the tangent for the purpose of getting the intersection of the
739 tangent.

Mr. HENDERSON: Oh, I see.

Mr. WEDGWOOD:

Q. Now, going beyond to 670, illustrate the best you can whether the stakes were continuous out on the tangent?

A. 670?

Q. Yes, sir.

A. Yes, sir, and a stake at 670 plus 50, and a stake at "P. T." I haven't the notes now. I made a note of it.

Recess until 2 o'clock p. m.

Resuming session.

SAMUEL NORRIS, called for cross-examination.

Examined by Mr. HENDERSON:

Q. Mr. Norris, you say you first went to work up there on the first of July?

A. Yes, sir.

Q. Let's see, was you then at work for the Rio Grande?

A. Yes, sir.

Q. Are you still at work for them?

A. Yes, sir.

Q. Been in their employ ever since?

A. Yes, sir.

Q. Where are you employed now?

A. On the main line.

Q. What is your age?

A. 24.

Q. 24; how long have you been in their employ?

A. Most of the time since '91.

Q. '91; you have been employed then seven years?

A. Yes, sir.

Q. Six or seven years?

A. Seven years and over.

Q. Commenced when you was 17 years old; that would be right?

A. Yes, sir.

Q. Yes, and you say that when you commenced there you did not see any work?
A. No, sir.
Q. That had been done?
A. No, sir.
Q. Saw none at all?
Mr. HARKNESS: Where?

Mr. HENDERSON:

Q. At Standing rock; you didn't see any work?
740 Q. You was at work all the time on the south side?
A. Yes, sir.
Q. Did you have charge of the grading?
A. Yes, sir.
Q. You were the person that had the charge of the grading?
A. Yes, sir.
Q. Well, what was your business at that time, superintending the grading?
A. Yes, sir.
Q. From whom did you receive your instructions about the grading?
A. Mr. Baxter usually.
Q. How was that?
A. Mr. Baxter usually.
Q. Mr. Baxter; did you receive any from Judge Harkness?
A. Why, I believe I got a note or something from Judge Harkness or somebody connected with the firm, I believe it was Judge Harkness, at the time I stopped work at Hanging rock.
Q. Hadn't you before then?
A. No, sir.
Q. Not at all?
A. Not that I know of, I think not.
Q. When you commenced in there was anything said about how long you would continue?
A. No, sir.
Q. Was it said that it would probably be temporary?
A. I don't think there was anything said about it; I am sure that there was not.
Q. Did you know that the arrangement with the graders was made so that it could be terminated at any time?
A. No, sir; I did not.
Q. You didn't know anything about that at all?
A. No, sir.
Q. Didn't you know that this work was being put right in there at that place for the purpose of bringing on a contention with the Telluride people?
A. At which place?
Q. Well, the place where you was at work grading?
A. Well, where? I was there all the time.
Q. Well, where you was grading?
A. No, sir.

Q. The grading there at Standing rock—Hanging rock, I mean?

741 A. You mean the general grading don't you?

Q. You mean the grading near the Hanging rock?

A. There wasn't anything said about the work just above Hanging rock.

Q. Read the question, Mr. Reporter.

Following question read: "Didn't you know that this work was being put right in there at that place for the purpose of bringing on a contention with the Telluride people?"

A. Well, at what place?

Q. Well, any place?

A. No, sir; I did not.

Q. Why did you ask any place then, if it wasn't any of them; what difference did it make at what place it was, if it wasn't any of them?

A. No response.

Q. Didn't you know that the change was made form the—in the first place didn't you know that the work that you was putting in up above near the South fork was put in for the purpose of bringing on a contention with the Telluride people?

A. No, sir; I don't think it was.

Q. You don't think it was?

A. No, sir.

Q. You think still that it was not?

A. Yes, sir.

Q. Didn't you then know that the work was then being changed down right at the site of their proposed dam or near it, approaching it under directions from Mr. Dodge to Judge Harkness that they should move their works nearer the site of the dam to bring on the controversy?

A. No, sir; I didn't know anything about the understanding that Col. Dodge and Judge Harkness had.

Q. Don't you know anything about that at all? Well, you did know that that up in there was in the bottom of what was supposed to be a proposed dam, didn't you?

A. Yes, sir.

Q. You knew that when you commenced up there?

A. Yes, sir.

Q. And you knew that the site of the proposed dam was at Hanging —?

—. ——.

742 Q. You understood that; who did you learn it from?

A. The first I heard about it was from Mr. Baxter.

Q. From Baxter?

A. Yes, sir.

Q. And where was you when he told you of it?

A. Down in Sevier canyon.

Q. It was before you came up here at all?

A. Yes, sir; it was when I left Sevier canyon; I came up with him from Sevier canyon.

Q. Yes, and he told you that they had proposed putting in a dam right at this place Hanging rock?

A. He didn't say where; he said Provo canyon.

Q. Well, I ask you now when you first learned that that was the site of their proposed dam at Hanging rock?

A. Why, I suppose it was the first time I went up there.

Q. Well, who told you?

A. I don't remember; somebody connected with Mr. Baxter's party.

Q. Somebody connected with Mr. Baxter's party told you?

A. Yes, sir.

Q. And told you at the time you went there first?

A. Told me so when I got up there.

Q. Told you when you got up there?

A. Yes, sir.

Q. And can't you tell who it was?

A. I can't say who it was.

Q. Can't remember who it was?

A. No, sir.

Q. You do remember who it was that first told you that they proposed to build a dam up there?

A. Yes, sir.

Q. And did you make an examination of the ground over on the north side at Hanging rock?

A. I never went over it for the purpose of making an examination. I was on the ground a good deal all the time when I was up there.

Q. You was on the ground on the north side as well?

A. Yes, sir.

Q. Passing along the road?

A. Yes, sir; it was necessary to go along there to get to our work.

743 Q. And that was all the examination you made there; that is true, is it?

A. Yes.

Q. Yes, and you didn't see any evidence of any work there?

A. No, sir.

Q. Didn't you see the brush cut?

A. I noticed that there was an opening through, but I never noticed whether the brush was cut or not; I suppose it was.

Q. Well, you noticed the opening right at Hanging rock, didn't you?

A. Yes, sir.

Q. Well, it opened right towards the river, didn't it?

A. Yes, sir.

Q. Well, now it was a wide opening, wasn't it over a hundred feet wide?

A. No, I don't think it was; I think it was somewheres near fifty.

Q. Somewheres near fifty?
A. Yes, sir.
Q. You don't think it was 125?
A. No, I am sure it wasn't 125.
Q. You are sure of that?
A. Yes, sir.
Q. The brush was cut wasn't it and piled up in patches?
A. No, sir; if there was brush cut there it had been burned up before I got there.
Q. Burned up before you got there?
A. Yes, sir.
Q. Did you see any evidence of any having been burned?
A. No, sir; not that I noticed.
Q. But there was evidence of it having been cut?
A. Yes, sir.
Q. And on the other side of the river there was another opening?
A. I don't know.
Q. Didn't you notice that on the south side?
A. I did not notice an opening, no, sir.
Q. Wasn't it true, and didn't you notice that it was right open between the two Hanging rocks and the willows all piled up
744 or either burned up?
A. Yes, sir.
Q. Then it must have extended on the other side of the river, didn't it?
A. Couldn't very well.
Q. What?
A. Couldn't very well.
Q. Couldn't have extended across the river?
A. No, sir.
Q. Why?
A. Because the river is right against the rock.
Q. Wasn't there any willow on the other side?
A. Not immediately on the other side; there was some up on the side of the canyon.
Q. Was there any willow between the Hanging rock on the south side of the river?
A. No, sir.
Q. None at all; there was above and below, wasn't there?
A. Yes, sir.
Q. So that the willows was open right through there, and so that you could see that, and it was in a straight line, wasn't it, running right straight down to the river?
A. Yes, sir.
Q. Did you make any examination to see whether any work has been done around the ground on the north side?
A. No, sir; I did not have any occasion to make any examination.
Q. Did not have any occasion?
A. If anything—if there had been anything there I could have seen it.

Q. Oh, yes, of course you could have seen it without noticing, and you are prepared to say there wasn't any, are you?

A. No, I won't say there wasn't any.

Q. Well, do you want to say then that you would have noticed it if there had been any?

A. Oh, there might have been some little work that wasn't of any consequence, or something——

Q. (Int.) Oh, of course.

A. But I didn't see it.

Q. You was a judge of the consequence of the work made up there——

A. I could judge whether there was any amount of work done or not.

745 Q. Would you judge if there was any pits dug down there between Standing rock and the river, if there had been pits dug in there for the purpose of ascertaining whether there was bed rock there or not?

A. Yes, sir; I would.

Q. You would have noticed that?

A. Yes, sir.

Q. You would have noticed every point there in the brush, so that it was impossible for a pit to be there and you not see it?

A. I went all through the brush; had business in the brush.

Q. Went all through there; so that there couldn't have been any pits in the brush?

A. Yes, sir; I think so.

Q. Think there could have been a hole dug there without your knowing it?

A. Yes, sir.

Q. And you are prepared to speak of that with as much certainty as you are the other that you are testifying about?

A. Yes, sir.

Q. And there could not have been any particular work done about the Standing rock on the north side?

A. Yes, sir.

Q. You are willing to swear to the fact?

A. Yes, sir.

Q. Now, you testified here something about being stopped in the work up there; you was not disturbed until you came down to Hanging rock, was you?

A. Why, I was disturbed on the work on a channel change, before the trouble at Hanging rock.

Q. Where was that?

A. That was beginning right opposite the Hanging rock on the north side of the river and extending up to and next to the river fro probably 350 feet.

Q. Where was you at work when you was stopped on that work?

A. On this work?

Q. On that work, what part of that work?

A. This channel change; the lower end.

Q. What part of the channel change?

A. On the whole thing.
Q. On the whole thing?
A. Yes, sir.
Q. What part of the work was you on when you was disturbed?
746 A. I was on the lower end.
Q. The lower end at Hanging rock?
A. Yes, sir.
Q. Well, that was at Hanging rock, wasn't it?
A. It was.
Q. Now, I ask you again if you was disturbed in doing any work there until you approached Hanging rock?
A. No, sir.
Q. No, and that you knew at that time was the site of their proposed dam?
A. Yes, sir.
Q. And when you got down there with that grading, Mr. Cramer was there, and did that, didn't he?
A. Yes, sir.
Q. He stepped in front of your horses and stopped them, didn't he?
A. Yes, sir.
Q. And that same day Judge King came there, didn't he?
A. No, sir.
Q. Didn't Judge King come there?
A. No, sir; not that day.
Q. Not that day?
A. No, sir.
Q. Did he come there soon after?
A. Not at that time of the disturbance on the channel change.
Q. How was that?
A. No, not at that time of the disturbance on the channel change.
Q. I am not talking about the channel change?
A. Well, I understood——
Q. I am talking about your grading when he came down there and stopped you on that grading?
A. I misunderstood you; he came up there that day.
Q. Came up that day?
A. Yes, sir.
Q. That was the day Mr. Cramer stepped in front of your horses?
A. No, sir; we didn't use any horses on that work.
Q. Wasn't using any horses at all?
A. No, sir.
Q. That was on the north side?
A. When he stepped in front of the horses, yes, sir.
Q. Yes.
A. Yes, sir.
Q. Was that the day that Judge King came there?
A. No, sir.

747 Q. When was that, the time that he was up there?

A. I am not certain now; I had the dates, but they are lost; I believe it was about the 15th of September, but I am not certain as to the day of the month.

Q. About the 15th of September?

A. I believe so.

Q. And how did Mr. Cramer come up there at the time that he stopped you over on the south side; how did he come up there that day?

A. Up to the work?

Q. Yes.

A. He rode his horse up from Thayer'd and walked across the foot bridge that they had erected rightopposite the rock.

Q. He came up on his horse?

A. Yes, sir.

Q. Now, you was only stopped twice, was you; there was only twice——

A. Yes, sir.

Q. That you had those times?

A. Yes, sir.

Q. Now, that time when you was stopped on the south side of the river, wasn't that about the 8th or 9th of September?

A. It may have been I am not certain.

Q. Do you remember whether it was in August the first time that you was stopped?

A. I believe it was, I think it was the 2nd of August, but I haven't any way of fixing the date now.

Q. Well, you stopped work there that day, did you, on the north side when he came up there?

A. Yes, sir.

Q. Then where did you go?

A. Well, we—this work was done in connection with the work just above the Hanging rock, and we still continued our work just above Hanging rock.

Q. Went upstream further and continued your work?

A. No, we didn't move at all from the railroad grading that we were working on when we put these teams to work on the channel change.

Q. Well, you went up the river, didn't you at the other
748 end of that channel change?

A. No; we didn't lose any work at all on that channel change.

Q. Well, then, if you stopped there where did you go then?

A. Went right on to the south side of the river and continued on the work that we were working on all the time.

Q. Oh, yes.

A. We didn't stop that work.

Q. Then you went over and continued your work down the stream on the grade on the south side?

A. Yes, sir.

Q. And then when you got down to the Standing rock on that side, he stopped you; that is true?

A. When we went over to the Hanging rock he stopped us.

Q. Well, you didn't go quite down then to the Hanging rock?

A. No, we never did go down with the grade to Hanging rock.

Q. Well, the place where he stopped you, where he came up and stood in front of your horses was right at Hanging rock, wasn't it?

A. Just immediately above it.

Q. Just immediately above it; just as you was approaching?

A. Yes, sir.

Q. And it was two weeks wasn't it ten days to two weeks after you quit on the north side before he stopped you on the south side?

A. Something like that.

Q. Well, in the meantime had you gone back over there and was continuing that grade down to Hanging rock?

A. Yes, sir.

Q. And it was when you got just above it that he stopped you?

A. No, sir.

Q. Where was it?

A. After we finished it; some time between these two dates; we finished up our work just above the Hanging rock, as far as we had material in our cut to make our fill down towards the Hanging rock; and then we moved up to the upper work above South fork; and then we were working there at the time when we got into the conflict at the Hanging rock.

749 Q. Well, then you had some men at work down at that place, sent some down there to work?

A. Yes, sir.

Q. While you was going to then fill in from the other way, from towards the Hanging rock down?

A. Yes, sir.

Q. And that brought your teams and hands right up next to the rock?

A. No, we didn't have any hands; our hands.

Q. Well, whatever you was doing?

A. Yes, sir.

Q. Took you right up there?

A. Yes, sir.

Q. And there is where he stopped you?

A. Yes, sir.

Q. And he told you at that time, didn't he, that you couldn't work there, that that was being used for their dam?

A. Yes, sir.

Q. He told you, didn't he, that he expected to use that rock as a part of their dam?

A. Yes, sir.

Q. And tole you that he didn't want you to blow it out of there?

A. Yes, sir.

Q. That he was using it as an abutment to his dam?

A. Yes, sir.

Q. That is what he told you?
A. Yes, sir.
Q. And that is the reason that he wouldn't let you work there?
A. Yes, sir.
Q. Now, Mr. Norris, I want to ask you about that business that you went up there on yesterday. You went up there yesterday and made examination through an instrument?
A. Yes, sir.
Q. Took an instrument?
A. Yes, sir.
Q. What instrument?
A. A transit.
Q. A transit, and you started to run; 665 plus 36, you found that place?
A. Yes, sir.
Q. That is what you call the hub?
A. Yes, sir.
Q. And that is called the hub because that is where the curve swings, ain't it?
A. Well, the reason we call it a hub is becauce we have a little sharper stake, which we drive down to the surface of the ground so as it won't get knocked out.
750 Q. Well, tell us——
Mr. WEDGWOOD: Let him finish it, Judge.
A. Well, that is all.

Mr. HENDERSON:

Q. Go on?
A. That is all.
Q. I understood him to stop; it is put in in that way because that is the place where the curve begins to swing?
A. Yes, sir.
Q. This was a tangent along here (indicating)?
A. Yes, sir.
Q. By that is meant a straight line?
A. Yes, sir.
Q. In running a railroad where you run along a line like that perfectly straight, that is a tangent?
A. Yes, sir.
Q. And then you strike a curve like that (illustrating), and strike another straight piece, and that is another tangent?
A. Yes, sir.
Q. And the curves are between the tangents?
A. Yes, sir.
Q. Now, that is straight right on the, right at the end, supposed to be, of the tangent?
A. Yes, sir.
Q. Now, 666, which is one there that you stated you found eight inches off of the tangent?
A. 666?

Q. 666, you say you found that by putting it from there (indicating) was eight inches off from the tangent?

A. Yes.

Q. And how far is that down from there?

A. That is 64 feet.

Q. 64 feet down you found that?

A. Yes, sir.

Q. Then you went down here to the 666 plus 50?

A. Yes, sir.

Q. And there you say that you did set a stake over here on the line of this tangent for some purpose?

A. Yes, sir; we set a hub.

Q. You set a hub there?

A. Yes, sir.

Q. What was that for; just explain that again, I didn't get the idea, why you set that there?

751 A. Well, when we had a tangent back here that we knew the location that we wanted to put it from our preliminary, and in order to fit our curve correctly it was necessary to run this tangent back to what we call the intersection, this point here (indicating).

Q. Yes?

A. And measure that angle, and calculate the distance from this point that is called the vertex, down to the point that is called the P. S., and in order to do that we had to set this point on the edge of the river, that is what it was set for anyway; it may not have been absolutely necessary, but then it is usual.

Q. It is usual?

A. Yes, sir; for the chainman to set the hub as far up as they go, and the object in setting this point was to get a line from here to make this intersection, being necessary to set two or three hubs here, because we wouldn't know where it was going until we ran this other line back.

Q. Well, that was simply for temporary purposes, to make calculations from?

A. Yes, sir.

Q. And why did you put a permanent hub in there?

A. Well, because it was on the tangent, and it would make a very good point at any time to take up a line again, in case we had made some mistake in our calculations.

Q. Tell me what kind of a mark you put on the ground where you established a station?

A. We usually set a stake about 18 inches long.

Q. Don't put a hub there?

A. No, sir.

Q. That isn't a hub?

A. No, sir.

Q. And what do you say the hub is for in the ordinary work?

A. Why, to make the points more secure, so as they will not be knocked out.

Q. It is to make more permanent points, isn't it?

A. Yes, sir.
Q. What is the object of putting in a usually permanent point to fix a place for a temporary calculation?
752 A. Well, usually when you set a transit point the usual custom is to put in a hub, whether it is supposed to be temporary or permanent; the chainman don't know how it will be effected in any way; it may have the—that is one of the things for them to look out for.
Q. But you was running a permanent line right around here on the curve, that would show if you got it located, that would show, wouldn't it?
A. Yes, sir.
Q. What use would this be?
A. This wouldn't be of any use.
Q. It wouldn't be of any use?
A. But it wouldn't be necessary to send a man back over a cliff etc., to pull it up. It isn't of any value to us.
Q. And a temporary stake there would have been just as good?
A. Yes, sir; it would have answered.
Q. It would have answered just as well, but you did put in a hub there?
A. Yes, sir.
Q. And you say that you went up yesterday morning and you found a stake up there, and it was laying on the ground?
A. Yes, sir.
Q. Where was that laying on the ground when you saw it?
A. Near that hub; about a foot from the hub.
Q. About a foot from it?
A. Yes, sir.
Q. Wasn't it laying right at the hub?
A. Oh, it was about a foot, may have been.
Q. About a foot; it was substantially right at the hub?
A. Yes, sir.
Q. And did you examine the stake?
A. Yes, sir.
Q. Where is it?
A. It is up there.
Q. It is up there; you put it up over here did you?
A. Yes, sir.
Q. And did you examine the bottom of that stake and the rest of it to see how it looked?
A. No, sir.
Q. Did you examine to see whether it had just lately come
753 out of the ground or not?
A. No, sir.
Q. Didn't you notice that that stake was perfectly clean and perfectly bleached, as though it had laid there in the water and in the sun for a long time?
A. No, sir.
Q. Didn't notice that?
A. No, sir.

Q. Didn't notice whether it did or not?

A. No, sir.

Q. And finding that stake laying right there by the side of that hub you took it over in there did, you, how far?

A. I did not take it over, but I saw it put there, between four and five feet.

Q. Who put it there?

A. Mr. Baxter.

Q. Mr. Baxter was there with you?

A. Yes, sir.

Q. And he took it and put it there; how many feet?

A. Between four and five.

Q. Between four and five feet; he took it over there and put it there, did he?

A. He didn't—yes, he put it there.

Q. And you say you found the hole there?

A. Yes, sir.

Q. How plainly marked was that hole?

A. Oh, it was—it wasn't any trouble to put the stake in with your hand down nine inches.

Q. Now, what is the character of the soil there?

A. Why, it isn't very hard; it is the usual, it is composed of the usual elements you find around the river bed.

Q. How far from the river bank?

A. That is about seven or eight feet.

Q. Seven or eight feet?

A. Yes, sir.

Q. It is right on the immediate level above the river bank itself, isn't it?

A. Yes, sir.

Q. Yes, it is the vegetable mould, the soil there is, that has accumulated on the bottom of that river bank, isn't it?

754 A. Yes, to a certain extent, the top.

Q. Yes, to a certain extent, what?

A. The top for about two or three inches.

Q. Two or three inches; isn't it more than that?

A. Oh, it may be, I never tested it.

Q. Now, you saw him find the hole there that looked as though it had come out of there?

A. Yes, sir.

Q. The hole well preserved on the top?

A. No, I didn't take particular notice; Mr. Baxter said he had found the hole, and I watched him put the stake in it.

Q. He said he found the hole and you just simply saw him put the stake up there, you guessed it was the hole?

A. I saw him try to stick it in another place there and couldn't put it in.

Q. In which place was this other place?

A. It was in another place there clost to the hole.

Q. Oh, that is the way he found it, by sticking it in, until he found a soft place?

A. No, sir.
Q. Well, how was it?
A. I saw him find the hole and put the stake in.
Q. That was after he set it down in?
A. I saw him pull it out again there.
Q. You saw him pull it out; how near to the place where he had set it?
A. About four or five inches on each side, to a foot.
Q. And that being a soft place he set it in there?
A. I don't know that he did.
Q. Well, it was a soft place, wasn't it?
A. I suppose it was if it was a hole.
Q. Well, did you see a hole there?
A. No, sir.
Q. You didn't see any open hole; it was simply a soft place
755 in the earth there.
A. May have been.
Q. May have been; well, don't you know? What did you go up there for?
A. Went up there to see whether these stakes were right, the way I set them.
Q. And not finding it right you made it right?
A. No, sir.
Q. Well, you set it up over there?
A. Yes, sir; saw it set up rather.
Q. You saw it set up?
A. Yes, sir.
Q. You stood right over it while it was done; you would have seen the hole?
A. I would have found it if I was looking for it. I was not looking for the hole.
Q. You was not looking for the hole?
A. No, sir.
Q. What was he looking for?
A. He was looking for the hole.
Q. He was looking for the hole?
A. Yes, sir.
Q. But he wasn't the man that set it up first?
A. No, sir.
Q. He never had been there to set that stake up before, had he?
A. No, sir.
Q. You was there and set that stake up?
A. He was there when it was set up too, but he didn't see it up; that is what I mean.
Q. Well, I mean the first time?
A. Yes, sir.
Q. Was he there?
A. Yes, sir.
Q. Right at that stake?
A. He was in that vicinity.
Q. Yes, I know, in that vicinity, but I am asking about that place;

he wasn't there so as to know the particular place that stake was set up?

A. I don't know that he was.

Q. You don't know that he was; well, was you, the first time?

A. No, sir.

Q. Who ran the transit when that curve was being run?

A. Mr. Lupguard ran that end of the curve, and I ran the other.

Q. He ran this end of the curve, and you ran that one (indicating)?

A. Yes, sir.

756 Q. Well then, you wasn't there when that stake was set up the first time?

A. Oh, I was within a very few feet of there; I was with the party.

Q. Well, did you walk along there and see that after it was set?

A. Yes, I saw the stake there.

Q. You saw the stake, so that you know it had been set up at some time?

A. Yes, sir.

Q. You didn't put your transit on to see just where it had been set?

A. No, sir.

Q. He had done that before?

A. Yes, sir.

Q. Now, from station 666 to station 669 how far is it?

A. Three hundred feet.

Q. 300 feet, is it?

A. Yes, sir.

Q. To station 669 how far is it?

A. From 666?

Q. Yes?

A. 300 feet.

Q. Going back down the river from 669 plus 50, where is 669 plus 50 on there?

A. It isn't on there.

Q. Well, just tell me where it would be?

A. Fifty feet from there.

Q. Well, I don't know what proportion that would be if the way it is made, just make a little dot, I suppose it would be up in here somewhere?

A. Well, according to this it would be about in there.

Q. Yes, about up in there; now 668 plus 50 to 669 plus 50 would be how far?

A. 100 feet.

Q. 100 feet?

A. Yes, sir.

Q. And from 666 plus 50 to 669.50 how far?

A. 300 feet.

Q. 300 feet; now there is a station in there somewhere?

A. Yes, theoretically.

Q. Theoretically?

A. Yes, sir.

Q. Theoretically there is a station in there, and that is 300
757 feet from there?

A. Yes, sir.

Q. Now, did you measure when you was up there the distance between 668.50 and 669.50?

A. No, sir.

Q. You didn't run that?

A. I just check the line.

Q. How was that?

A. Just check the line of the stakes.

Q. And do you know whether they are on a tangent, whether the line doesn't run on a tangent from one to the other?

A. I know it doesn't.

Q. It runs on a curve?

A. Yes, sir.

Q. From one to the other? A. Now, it would be less than 200 feet from 669.50 to 667.50, wouldn't it?

A. On a straight line there yes, sir; a little, very little less.

Q. Well, it would be six or seven hundred feet less?

A. From 667.50 to 669.50?

Q. Yes.

A. Well, I can tell you within a half a foot if you want the exact distance. I can tell it to you in a minute by looking in a book.

Q. Well, just tell it to me then, if you can.

A. It would be 198 feet and 9.10 between these two stakes on the straight line.

Q. Between these two stakes?

Mr. WEDGWOOD: What two?

A. The station that is supposed to be here, isn't set, 67.50 to 69.50, this point that is up here, that stake is in there.

Mr. HENDERSON:

Q. Now, I ask you to station 666.50 to 668.50. That would be 200 feet wouldn't it?

A. Yes, sir.

Q. That is 200 feet?

A. Yes, sir.

Q. Now what would be the difference on a straight line between those two places?

A. Well, it would be just about the same thing

Q. It would be just about the same thing; did you make the measurements across there while you was up there this time?

A. No, sir.

758 Q. Do you know what, around the curve it would be just 200 feet even?

A. Yes, sir.

Q. Or ought to be that?

A. Yes, sir.

Q. Now, is there any, on this curve is there any cutting of brush between those stakes?

A. No, sir.
Q. No cutting?
A. No, sir.
Q. You can sight from one straight through to the other?
A. Yes, sir.
Q. And isn't there any brush in here?
A. No, sir.
Q. How is that, wasn't it to be cut so that you could see it?
A. No, it is in the river; the river runs in between those stakes.
Q. The river runs in between those stakes?
A. Yes, sir.
Q. So that you can see right across there from one stake to the other?
A. Yes, sir.
Q. Now, I want to ask you about another; did you find out that 668.50 was on the curve?
A. Yes, sir.
Q. Found out when you was up there?
A. Yes, sir.
Q. How did you find out. Just give us the process by which you found that out?
A. I had a man stay up on this point, at 666 plus 50 which is on a tangent, and took the angle to 668 plus 50, which is on the curve, and subtracted that difference or that angle from the whole angle in the curve up to 668 plus 50 which we calculated it would pass on the tangent to the curve, and then he turned the deflection up 50 feet to station 669, which is three degrees, and hit a stake which I had set for the center line of the railroad; and then——
Q. Well, what was that, on the tangent up here?
A. No, sir; that was on the curve 669 right here, and then we had him turn the angle for station 670 plus 17.7 I think it is, the P. S. S. where the spirrel begins on the other end of the
759 curve, and set a point at the top of the cliff on what is called the cord, between the station 668 plus 50 and the station I have just given.
Q. Well, that is on the tangent here, isn't it?
A. No, that is on here where the spirrel begins here that we were talking about, where that spirrel begins and that point we did not set on account of the water being up in a little slough that there is where this point ought to come; there is a little slough right in here that runs down to the river, and when I set that point, when we made the survey it was impossible to get in there on account of the water, but we set it yesterday and found the point on this tangent up here; here it is up here on this tangent, and produced that line back to a point opposite this point, known as Y in the spirrel formula, and checked this stake by measuring the distance across here, known as X in the formula.
Q. Yes. That is, you extended a line on the tangent out to there?
A. Yes, sir.

Q. And calculated the distance out here, as to where that stake should have been?

A. No, we took it from our formula.

Q. Yes, I know, you calculated it from your formula?

A. All we have to do is to read it.

Q. Yes, I know, read it and see; there wasn't a stake there at that time?

A. Not at that time; there was a stake 17 feet and 7.10 back on the curve, at station 670.

Q. But this was the point that you was giving up here?

A. Yes, sir.

Q. And there was no stake there?

A. No, sir.

Q. Well then, the truth is that you found that that was on the curve by making the begin-ing and ending of your calculations upon known points on the tangent, wasn't it?

A. Yes, sir.

Q. And that was the only way that you had of doing, wasn't it?

760 A. No, it was no- the only way, but that was the handiest way to get at it at that time as our time was limited and it checked our work that we had done in the regular way.

Q. What other way was there?

A. Oh, the only way you could get across here would be to have the chainmen wade this river, or have some one make the triangulation.

Q. When you made your survey, original survey and ran that angle, did you have any one go into the river?

A. No, we make no point of having stakes set in three or four feet of water.

Q. No, you didn't do that?

A. No, sir.

Q. So at that place you didn't know anything about what the surface of the land was or the ground under the water?

A. No, you couldn't see the center line.

Q. No, you couldn't see the center line, but that was the way you got that angle in there, wasn't it, yesterday?

A. Yesterday, yes, sir.

Q. By making that; how many stakes did you find on this curve? Well, I will say on the lower half of this curve, take the middle of the curve and come around this way, which is, I believe downstream, isn't it?

A. Yes, sir. Found 665 plus 36, and plus 50.

Q. Well, that 665 plus 36 that is the hub, that is the place where the angle begins?

A. Yes, sir.

Q. That would be on the tangent also?

A. Yes, sir.

Q. I mean now, how many points on that curve did you find off from the tangent?

A. Plus 50; station 665, 668 plus 50, station 669.

Q. Well, that would be to the tangent; now you spoke of finding 665 plus 50?

A. Yes, sir.

Q. How far was that off the tangent?

A. Well, I did not attempt to measure that because the
761 difference in the deflection of the spiral and tangent would be just a quarter of an inch.

Q. Which is substantially the same place?

A. Yes, sir.

Q. So that one stake really tells that?

A. Yes, sir.

Q. Whether tangent or both; there wasn't two stakes set up there?

A. No; could not be.

Q. Wasn't room enough to set up two stakes?

A. No, sir.

Q. So that that would be substantially on the tangent?

A. Yes, sir.

Q. 666 you found?

A. Yes, sir.

Q. And that was about eight inches off?

A. $\frac{7}{10}$ of a foot, I said.

Q. Well, that is about eight inches?

A. Yes, about eight inches.

Q. $\frac{7}{10}$ of a foot off, and was there any stake set on the tangent there?

A. No, sir.

Q. How big are these stakes that are set there; how big is the body of them?

A. They are about one inch by one and a half.

Q. How big are the hubs?

A. They are about the same thing; usually cut out of a willow or sort of a heavy brush that grows along the river.

Q. Now, 666 plus 50, you found a stake there on the tangent and the hole over on the curve; that is right, isn't it?

A. I did not find the hole.

Q. Well——

A. Yes, that is right.

Q. You found it on the tangent and left it on the curve?

A. No, sir; I did not find that stake on the tangent.

Q. How far from the tangent did you find it?

Q. Lying on the ground about a foot to the left.

Q. About a foot to the left, which is the left?

A. This way.

Q. You found it laying off from the tangent, away from it then, which way was it laying, lengthways?

A. Sort of diagonally, about the way that river runs.
762 Q. About the way that river runs?

A. Something like that, I judge.

Q. And it was a stake about how long?

A. About 18 inches, I think.

Q. Lying right in there close to that?

A. Yes, sir.
Q. And you left it standing there on the circle, on the curve?
A. Yes, sir.
Q. And the stake, the only stake you found in place there was right on the tangent, wasn't it?
A. Didn't find a stake there. I found a hub.
Q. Well, the plug?
A. Yes, sir.
Q. That is what they call a plug, isn't it?
A. A hub, yes, sir.
Q. You found that firmly set in place there, driven down?
A. Yes, sir.
Q. And in making railroad work of that kind what are the things that you use as a rule along the center points of the road?
A. For the points?
Q. To mark the points on the ground?
A. To mark the center line?
Q. Yes?
A. A stake about 18 inches long.
Q. A stake about 18 inches long?
A. Yes.
Q. And is that what you call a plug?
A. No, sir; that is what we call the center-line stake for marking stations and guard points.
Q. It isn't a plug?
A. No, sir.
Q. Do you set plugs in at occasions along the center line?
A. Usually wherever we take a point.
Q. Wherever you take a point on the line of the railroad you put a plug?
A. Yes, sir.

763 Q. And then if there is any further marking to be made by the side of it in any way, do you set up a stake right by the side of it?

A. Yes sir; and call that a guard-stake.
Q. Yes; when the line is finally laid and located along, isn't it true that you use plugs to denote that?
A. To denote which? Stations?
Q. To denote the stations?
A. No, sir.
Q. How often do you set plugs along the bed of the rover?
A. Wherever we find it necessary to move up our instrument.
Q. Wherever you find it necessary to move up your instrument?
A. Yes.
Q. And they are bases of calculation then?
A. Yes some places.
Q. Well, isn't that generally so, that you set your instrument over these plugs, I suppose they are driven down low so as you can set the plumb-ball right over them?
A. No, to keep them from being knocked out. It don't make any

difference how high the stake is so they didn't get it too high for the instrument, so as you can set your instrument over it.

Q. I know, but you have to set your instrument over it?

A. Yes, sir.

Q. And they are bases of observation, ain't they?

A. Yes, sir.

Q. And they mark the points of observation along the line, don't they?

A. Yes, sir.

Q. And they are marked with these hubs, these hubs are driven firmly into the ground, ain't they?

A. Yes, sir.

Q. Because if you check back over the work those are the points that you will want to use in doing that?

A. Yes, sir.

Q. These are the points that you have got to use in the future for checking back over the line to see if any error or mistake has been made?

A. Yes, sir.

Q. Do you ever drive a tack, put a tack in at the top of
764 these stakes, these plugs?

A. Yes, sometimes, when—it is quite frequently done put a tack in the top of one of these center stakes.

Q. What is the point of that?

A. Well, so we move up and set up over it.

Q. Well, that is to denote a particular point?

A. On the stake?

Q. On the plug?

A. To keep our line exact.

Q. Yes, to keep the line exact; it marks a particular point on the line, don't it?

A. Yes, sir.

Q. And that is observed I suppose as you go along over the road?

A. Well, not always.

Q. Not always?

A. As I understand you.

Q. You don't put a tack in all of them?

A. No, sir.

Q. What ones do you put the tack in?

A. Usually the one that we either set our instrument up over, or expect to.

Q. Or expect to?

A. Yes, sir.

Q. And they are points of more particular importance, I suppose?

A. Yes, sir.

Q. On the line?

A. Yes, sir.

Q. Now, this hub that you found in up there yesterday at 666.50 that was driven over there on the tangent, had that a tack in the top of it? Didn't it?

A. Yes, sir.

Redirect examination.

By Mr. WEDGWOOD:

Q. Now, at 10, 15, Mr. Norris, it is marked P. S. here, what would be the other deflection at 666.50 on the curve 10, 15?

A. It would be five minutes.

Q. Well, you say about a quarter of an inch?

A. Quarter of an inch, yes, sir.

765 Mr. HENDERSON: Well, Mr. Wedgwood, ain't you in error about 666.50?

Mr. WEDGWOOD: 665.50; from 665.36 to 666.50; it would be a about a quarter of an inch?

A. Less than a quarter of an inch.

Q. So that would be impossible to set a stake off from the tangent line?

A. Yes, sir.

Q. Now, I will ask you, Mr. Norris, if a man with an instrument could readily see that 666 was not on the tangent line, between the plug here, 666.50, from there on?

A. He could see it with his eye.

Q. If he understood his business?

A. Yes, if he understood his business.

Q. Now, in answer to Judge Henderson he asked you about some willows on the south side; I wish you would just illustrate on the board the water and the, on the south side where the water runs with reference to Hanging rock; just roughly illustrate the rock and river.

A. Well, we will say this is the Hanging rock as it faces, looking up the river; let that dotted line represent the water.

Q. That is, the water runs right up against Hanging rock, does it?

A. Yes, sir; on the south side, did I understand you to say?

Q. Yes, sir.

A. Yes, sir.

Q. Now, Judge Henderson put these words in your mouth "he was using Hanging rock as an abutment;" now, did you see Hanging rock used for anything?

A. No, sir.

Q. If there was any use for Hanging rock was it an actual fact, or in his mind at that time?

A. It was in his mind.

Mr. HARKNESS: I would like to ask a question or two.

Q. Mr. Norris, at what time did Baxter tell you down in Sevier canyon that the power folks were contemplating a dam in Provo canyon?

A. It was just before I went up in Provo canyon; may have
766 been the 27th or 28th of June.

Q. Let me call your attention to the dates you were interrupted again, and see if on reflection you can fix those in your mind

more definitely by the time you were up there, how long you had been to work, something of that kind?

A. No, I can't say that I can.

Q. Was you a witness on the trial of another case here about a year ago?

A. Yes, sir.

Q. Did you then have the means of giving the dates?

A. Yes, sir.

Q. If you have them at that time would it be correct?

A. Correct to the best of my knowledge and belief.

Q. Mr. HENDERSON: Judge,—I would like to ask him first—I shan't offer any objection to the judge's doing that after I have asked him a question or two, and I will do it now, if you wish?

Mr. HARKNESS: All right.

Mr. HENDERSON:

Q. Mr. Norris, what data did you have then that you have not got now?

A. I made a memorandum shortly after that time when the dates were in my mind.

Q. Shortly after what time?

A. The time we had the difficulty, some time after that, in a memorandum book, but we had some articles stolen out of our outfit since the last trial and this book was taken with the other articles.

Q. So that you haven't got this book now; well, haven't you looked at your testimony since the time, what dates you gave then?

A. No, I did not look at it.

Mr. HENDERSON: Well, we have no objection at all.

Mr. HARKNESS:

Q. You may say whether this is according to your recollection or not, or whether it was correct at that time? "They stopped me August 3rd in one place and about September 8th in another place?

A. Well, that is probably correct, because I haven't any other recollection of it only approximately now.

767 Q. You stated on the direct examination that it would be about September 15th when you stopped; what do you now say?

A. Well, I know it was in September some time, but I didn't know of any exact date; that was just my remembrance; it was probably wrong; is wrong if I testified to that in the other trial.

Q. Now, being refreshed by what I have read here what do you say now?

A. I say that testimony is correct.

Recross-examination.

Examined by Mr. HENDERSON:

Q. That is the time when you stopped on the north side was August 3rd, but the other was about the 8th or 9th?
A. Yes, sir.
Q. Of September?
A. Yes, sir.
Q. That was what I asked you for the other time. I had looked at your testimony and saw that there was a discrepancy of a few days and couldn't understand the reason for it.
A. Yes, sir.
Q. And that was because your memorandum book had been taken away?
A. Lost, yes, sir.
Q. Now, Mr. Norris, you spoke of, that if they thought of using that rock for a dam that it was in their mind only; is that what you said?
A. Yes, sir.
Q. It was in your mind too, wasn't it?
A. Yes, sir.
Q. You knew it at that time, didn't you?
A. I knew that was their intentions, or what was stated to me.
Q. And you can't tell how you got it, can you?
A. I got it first from Mr. Baxter; that is the best of my recollection.
Q. Oh, but Mr. Baxter told you it was somewhere in the canyon?
A. Yes, sir.
Q. But he didn't tell you at Hanging rock, did he?
A. No, sir.
768 Q. You can't tell how you got that information that it was to be at that particular place?
A. I got it there from some of Mr. Baxter's party, that is all I know.
Q. Now, let me ask you again about this here; Mr. Wedgwood called your attention to this 666 station here, that would be about how far off the line, should be, no, 666.50, how far off the tangent would that be?
A. Why, between four and five feet.
Q. Between four and five feet; that would be in the brush wouldn't it?
A. Yes.
Q. You can't stand at a station up here and see that stake, can you?
A. Yes, sir.
Q. You can?
A. Yes, sir.
Q. With the naked eye?
A. Yes, sir.
Q. Looking right across that?

A. No, I can't say; the stake might have been down under the——

Q. (Int.) That is what I am asking about; I don't mean that you can see the air above it, but I mean the stake?

A. You can't see the stake, no, the grass would hide that——

Q. (Int.) Well then, you don't mean that a man that understands his business as well as you did can tell whether that is on the tangent as well as you did?

A. I didn't say anything about that; I say a man that understands his business can stand here and see that this stake isn't on a line with that stake (indicating); and I say it again.

Q. Oh, yes, that stake isn't on a line with that; you can see that stake, can you, from each of these?

A. Can see it in the same way he saw it.

Q. Can you see the stake there, standing here looking this way?

A. Standing there looking this way I can see the grade stake to this one (indicating).

Q. Well, the grade stakes to which?

769 A. Can't see the hub, because it is down the hill.

Q. I mean standing there and looking that way can you see that stake in there?

A. I can see that stake, yes, sir.

Q. See the stake itself?

A. Yes, sir.

Q. Can you standing here looking this way see that stake?

A. Yes, sir.

Q. And see the stake beyond it?

A. See the grade stake, yes, sir.

Q. The grade stake?

A. Yes, sir.

Q. The grade stake is near that, stands right by the side of it?

A. Yes, sir.

Q. Put up with anything marked on the grade stake?

A. 665 plus 36 P. S. 10 15.

Q. The grade stake, you mean by that that it is set by the side of a hub, that more fully explains what it is?

A. Yes, sir.

Q. And just exactly as that would have appeared up there if that stake that you found lying down there had been stuck in right by the side of that hub?

A. Yes, sir.

Mr. WEDGWOOD:

Q. Was that stake you found laying down there marked properly for a grade stake?

A. No, sir; that stake didn't have any connection with that hub whatever.

Q. Didn't show it by marks?

A. No, sir.

Q. If it had had, would it have shown it by marks?

A. Yes, sir.

Mr. HENDERSON:

Q. What different marks are on the grade stakes?

A. Well, if that stake had been set for that hub it would have had the right plus on it for one thing, and if it had the right plus on it would have the P. after the figures to denote that there was a point there.

770 F. E. BAXTER, called in rebuttal.

Examined by Mr. WEDGWOOD:

Q. Mr. Baxter, do you know where the county road is in Provo canyon?

A. Yes, sir.

Q. With reference to the Ferguson place?

A. Yes, sir.

Q. Where does it run?

A. It runs next to the foothills as a general thing on the north side of the river.

Q. At how much of an elevation above the river—which side of the river?

A. On the north side.

Q. At how much of an elevation above the river does it run from five miles above Hanging rock with reference to the 85-foot stakes that have been testified to in this case?

Mr. HENDERSON: I object to that as incompetent and immaterial.

The COURT: It is the same objection. Same ruling.

Mr. HENDERSON: Give us an exception.

A. For the greater portion of the road it is considerably below the 85-foot level.

Q. Then what would be the result if water was raised to the height of 85 feet at Hanging rock with reference to that county road?

A. Well, the county road would be submerged.

Q. For how long a distance?

A. Three or maybe four miles, I should think.

Q. Now, what would be the practicability—and well, I will leave that out, that word, of building a county road, changing it from its present location so as to overcome an obstruction across the canyon 85 feet high at Hanging rock, considering the grade going up there?

A. What would be the practicability?

Q. Yes.

A. Why, it would be a very expensive piece of road to construct.

Q. And approximately what character of ground would it run through?

A. It would be on very steep ground as a road; some places it would be in rock cliffs.

771 Q. In rock cliffs; now in regard to cuts, in making there a road, a railroad up at that height in that canyon *was* it is, just show or illustrate on the board what the character of the cuts

would be, what the cut in height would be in proportion to the level places?

A. The height of the cut in proportion to the width of the road-bed?

Q. Yes?

A. It would vary in different places.

Q. Yes, and what would it be as a general thing.

Mr. HENDERSON: Now, at what places?

Mr. WEDGWOOD:

Q. Well, say the county road-bed taken up to a height to overcome an 85 feet of water backed up there?

A. Well, in some places it would run up as high as that in proportion to some places here, and some places not as high according to the steepness of the hillsides.

Q. What would be the fact in relation to rock cuts, and would there be any if you know?

A. Well, some of the rock cuts would run pretty high, because it would be in cliffs; you would have to run up a great distance in order to get out of the cuts.

Q. You know the county road on the south side of the river running up South fork?

A. Yes, sir.

Q. Now, I will ask you to describe according to your best judgment what kind of a country the road would go through, supposing there was a road carried up on the south side of the canyon so as to make a road up South fork, overcoming an 85-foot water level raised at Hanging rock?

A. Want to know the character of the ground?

Q. Yes?

A. Well, it would be very steep ground, mostly, or a very considerable amount of rock-work.

Q. There would be a considerable amount of rock-work?

A. Yes, sir.

Q. Anything in relation to tunnels or half tunnels, or what would be the fact?

A. Oh, I don't think it would be necessary to build any tunnels for a wagon road.

772 Q. No tunnels for a wagon road; now, Mr. Baxter, I show you the map of the eighty-foot contour as introduced in evidence by them, and I will ask you to take a scale and show what the length of a bridge from the south side or from the north side of the river to the south side of the river would be to go up South Fork canyon?

The COURT: One of the jurors asks to be excused for a few minutes.

Recess for 10 minutes.

Resumed session.

F. E. BAXTER, recalled.

Mr. WEDGWOOD:

Q. I will ask you, Mr. Baxter, what would be the ways in which travel could go up South fork, or what arrangements could be made so travel could go up and down South Fork canyon, and up and down Provo canyon if the water was raised to 85 feet at Hanging rock and backed to that height?

A. They could build a wagon road on the south side of the river from a point below the dam or from a point above the upper end of the reservoir; run it along the side hill; or bridge it; bridge the river.

Q. Or bridge it; there would be those three ways?

A. Yes, sir.

Q. How long then approximately take this map—would the road be lengthened to go around the upper end of the reservoir, coming from Provo we will say, or coming from South fork?

A. Well, going from Provo if you build it around the upper end of the reservoir, you would lengthen the road about eight miles.

Q. Well, if the testimony of Mr. Searles was it would flow the water five miles back from Hanging rock, what would be the distance?

A. Well, it would be about eight miles; see the dam is something like a mile below the South fork, about four miles.

Q. Now, if you haven't done so, state what that map shows the distance would be across the surface of the water from the
773 north side of the river to the South fork, contemplating a bridge in the shortest place?

A. The shortest place just below South fork would be 500 feet long, and the shortest place just above would be 800 from one side to the other, water level.

Q. Calling your attention to this I guess you will recognize it; now, you may state, Mr. Baxter whether or not if the water was raised 15 feet higher than the present road grade as established by the profile and shown and illustrated by that map whether or not that right of way 200 feet wide would be enough of it out of the water so that a road-bed could be built on it?

A. No, sir.

Q. Would part or portions of it be entirely under water?

A. Yes, sir.

Q. And state from that approximately, just state what would be left out of water?

A. What portion of the acr-age, the total amount of it would be left out?

Q. Yes, or what proportion along the line or rather——

A. (Int.) About 2,000 feet or upwards of that would be entirely submerged out of the 4,500 feet.

Mr. HENDERSON:

Q. State that again, please, about 2,000 feet out of how much?

A. Out of 4,500, I think the total is, would be submerged.

Q. Nearly half of it?
A. Nearly half of it.

Mr. WEDGWOOD:

Q. Well, how would the other 2,500 feet be, Mr. Baxter?
A. Well, I think fully two-thirds of the balance would be submerged.
Q. Fully two-thirds, what do you mean down the hill or in acreage?
Mr. HENDERSON: I don't understand that, about what that means; I understood him to say it would submerge about 2,000 feet out of about 4,500 feet?
A. Yes, sir.

Mr. WEDGWOOD:

Q. Yes, entirely under water, the whole width?
A. The whole width for the 2,000 feet, and the two-thirds of the balance.
774 Q. Oh, I see, you are using linear measurement?
A. Linear measurement.
Q. And would there be enough left of the balance of this 2,500 feet to build a road on?
A. No, sir.
Q. I don't know but what my question may have been misleading, Mr. Baxter; I will ask you whether or not that would be true, whether that is a fact if the water was raised to a height of 85 feet at Hanging rock?
A. That would be practically true because that would be nearly to the level you spoke of before.
Q. Practically the same level?
A. It would be a little lower than the first.
Q. A little lower than the first?
A. Yes, sir.
Q. Now, Mr. Baxter, I will ask you if you have been in Provo canyon lately?
A. I have.
Q. When?
A. Yesterday.
Q. I will ask you to turn to this diagram there on the blackboard, and see if you know the place that that is supposed to approximately represent?
A. Yes, sir; I know that place.
Q. And where is it?
A. It is just below the South fork, of the river.
Q. It is on the Ferguson place?
A. It is on the Ferguson place.
Q. Now, I will ask you if you saw station 665 plus 36?
A. I did.
Q. And 65 plus 50?
A. Yes, sir.
Q. And station 666?

A. Yes, sir.
Q. And section 666 plus 50?
A. I found the stake.
Q. Found the stake?
A. 666 plus 50, yes, sir.
Q. And 669?
A. Yes, sir.
Q. Now, Mr. Baxter, I will ask you whether from 668 plus 50 there is two or three stakes in sight there?
775 A. Section 668 plus 50, there is only one stake in sight, that is going up the hill, that is the two stakes, beginning 668 and two stakes on the hillside.
Q. And for what reason if any isn't there a third stake in sight?
A. 669 plus 50 would be on the other side of the hill, but it isn't standing, and if a stake was set on the top of the hill, which probably was, or the top of the cliff, while a stake wasn't set, there might have been a point established there. There was no stake set for the reason that no stake could be driven, and in that case we would make a cross with a lead pencil on top and set a stake beside it.
Q. Why couldn't a stake be driven?
A. It is solid rock.
Q. I ask you why couldn't a stake be seen there looking from section 668 plus 50?
A. Well, there is no stake there.
Q. Well, over the hill is it; that is what I asked you?
A. Yes, it is beyond the hill.
Q. Well, if you went to 669 and looked down——
A. You could see two stakes.
Q. Now, I will ask you what you found along the line from section 665 plus 36; did you find a stake there marked P. S.?
A. Yes, sir.
Q. And did you follow along that, did you follow along the tangent?
A. Yes, sir.
Q. What did you find at section 666?
A. Found a stake in place on the spirrel.
Q. How was the stake at 665 plus 36 marked?
A. It was marked "665 plus 36, P. S. 10 15," I think.
Q. And what did the 10 15 indicate?
A. 10 spirrel cords 15 feet long each.
Q. Well, with reference to 665 plus 36 P. S. how was the section 666 set with reference to it?
A. The tangent?
Q. Well, how was it set with reference to that stake?
776 A. It was set 64 feet distant from it, and I should judge it was $\frac{8}{10}$ of a foot off from the tangent line.
Q. Off the tangent line; well, was it off the tangent line according to the figures stated on the stake at 665 plus 36?
A. Yes, sir; it was in the proper place in regard to that stake.
Q. Now, did you find anything up on the tangent line near 666 plus 50?

A. Yes, sir; at 666 plus 50 we found a hub.

Q. Now, was there an instrument used there?

A. Yes, sir.

Q. Then I will ask you with reference to being on the line from the hub at 666 plus 50 to 665 plus 36, going from here over, what was the fact in regard to 66?

A. Well, station 66 wasn't on the line.

Q. Wasn't on the line?

A. No, sir.

Q. Now, at section 666 plus 50 what would be the deflection or offset off from the tangent?

A. It would be about four feet——

Q. Well, no, I should have said station 665 plus 50, that is what I mean.

A. Oh, 665 plus 50.

Q. Yes.

A. The spirrel would diverge from the tangent $\frac{2}{100}$ of a foot, about a quarter of an inch.

Q. Not enough to be marked on the ground?

A. No, sir.

Q. Now, what did you find at 666 plus 50?

A. I found a stake on the ground there.

Q. Tell what you found on the ground there or anywhere?

A. I found a stake.

Q. Where was the stake?

A. I don't think I saw the stake when it was on the ground: I think I saw it in Mr. Norris' hand first.

Q. Well, did you find the place in the ground where the stake had been set?

A. I found a hole in the ground where the stake should have been set.

Q. When you say should have been, what do you mean by that?

A. In the correct position for the stake.

777 Q. Well, did you find the hole in the place—in the correct place for the stake at station 666 plus 50?

A. Yes, sir.

Q. And did the stake go in there without any trouble?

A. Yes, fit right in.

Q. Now, state whether or not in their proper places 666 plus 50, 666, 665 plus 50 and 665 plus 36 were all on the spirrel curve indicated by the marks on stake 665 plus 36?

A. Yes, all the stakes standing in that alignment were in their true and correct position on the spirrel.

Q. And was it a true spirrel curve as indicated on the P. S. according to the stake 666 plus 50?

A. Yes, sir; as indicated on the profile, on the notes on the profile.

Q. Mr. Baxter, in your judgment what would be the increased cost of running a railroad up Provo canyon so as to overcome the grade or an obstacle placed in the river at the Hanging rock 85 feet high, as compared with the present location of the road?

A. I think it would increase the cost about $200,000.

Q. And what would be the effect of that upon the road in operating expenses, if any?

A. It would increase the operating expenses.

Q. Perpetually?

A. Yes, sir.

Q. Now, Mr. Baxter, take it in regard to a 25-foot raise of grade, or overcoming the water raised 25 feet above the water at Hanging rock, what would be the increased cost in your opinion?

A. About $25,000.

Q. About $25,000; I will ask you if you can tell from that data you have how far it would flow, or from any of their maps, how far it would flow the water back into South fork at an 85-foot level?

A. According to their map it would flow it back 1,800 or 2,000 feet.

Q. Now, can you tell how far that water would flow back there from any data you have or from their map, at a 25 feet above
778 the water at Hanging rock?

A. Oh, perhaps a quarter as much as that; the first part of the valley is flatter and gets steeper, and it would require probably more than a quarter of that distance, probably 500 feet, 600 feet.

Q. Ans what would be the distance running east and west as near as you can tell from your own profiles or from their map as a water elevation of four or five feet higher above water elevation; if the water was raised 25 feet above Hanging rock, that is from the east and west bank of South fork?

A. Between the east and west bank of South fork?

Q. Yes, that is up and down, where the road-bed would have to be?

A. A thousand feet; 900 to a thousand feet.

Mr. HENDERSON:

Q. What do I understand by that, that the water would come that wide?

Mr. WEDGWOOD:

A. Yes, that is the grade would be that wide so as to be able to be above the water.

Q. How long did you say, Mr. Baxter?

A. About a thousand feet long.

Q. The water would be on each side of it?

A. Yes, sir; there would be water on each side of this grade.

Q. And now with reference to the county road, suppose the road is made so as to overcome a 25-foot—water raised 25 feet above Hanging rock with a railroad grade built on that side, would there be a conflict?

A. If the county road was built on the north side?

Q. No, if the railroad was built on the north side?

A. Oh, there would be a conflict.

Q. Building a railroad at a height of 30 or 35 feet above the water would or would not raise the county road?

A. Well, it would destroy the county road.
Q. Well, you think it would destroy the county road?
A. Yes, sir.
779 Q. As it now exists?
A. Yes, sir.
Q. And the railroad or the county road one would have to go above the other?
A. One would have to go above the other.
Q. And still above the water?
A. Yes, sir.

Cross-examination.

By Mr. HENDERSON:

Q. Mr. Baxter, how long have you been at work for the Rio Grande railroad?
A. I have worked for them three different periods; this last time I have worked for them two years and a half.
Q. And how long was you in their employ before that?
A. Before that; I worked for them in the summer of '92.
Q. Summer of '92 you worked for them?
A. And then I worked for them in '92 '3 and '4.
Q. '82–'3–'4, how many years in all have you worked for them?
A. Oh, I guess about five.
Q. About five, of work?
A. Of work, actual work, yes.
Q. How many years ago did you commence for them?
A. Commenced for the Rio Grande Western in November '82.
Q. November '82?
A. '82.
Q. That is 25 years ago?
A. No, no, that is 16 years ago.
Q. 15 or 16 years ago?
A. 15 or 16 years ago.
Q. And the Western you say, was you at work for the Rio Grande?
A. I worked for the Denver and Rio Grande before that.
Q. They were building through as connecting lines were they not in the first place?
A. Yes.
Q. How long since you went with the Rio Grande Western first?
A. Since I went for the Rio Grande first?
Q. Yes?
A. '81, early in the year.
780 Q. Early in the year; about 17 years ago?
A. Yes.
Q. And since that time you have been at work for one or the other of these companies all the time, haven't you?
A. No, sir.
Q. How much of the time have you been out?

A. Well, I worked about a year and a half or two for the Denver & Rio Grande, and then about five years for this company.
Q. And what was you doing in the meantime?
A. I worked for the Colorado Midland, and worked for the Canada and Pikes Peak railroad.
Q. And how long for the Midland?
A. Five or six months.
Q. Five or six months; that was a connecting line?
A. No, sir.
Q. The Colorado Midland isn't?
A. Oh, it connects with this, but I don't think it is the same company.
Q. It isn't the same company, but it is a connecting line?
A. It is a connecting line, yes.
Q. Together with this it makes a connected line to Denver, don't it?
A. Yes, sir.
Q. How long did you work for them?
A. About six months.
Q. And the other times for the other roads?
A. Yes.
Q. And what is you- age?
A. I am 39.
Q. You commenced when you was 22 or 23 years old on railroad work?
A. When I was 22 years old, I think.
Q. For the Rio Grande?
A. Yes, sir.
Q. And you was sent up here to go and look through Provo canyon? on this enterprise?
A. In '96.
Q. You testified to that, I think; that was the first, was it?
A. Yes, sir.
Q. I suppose they instructed you to take care of the county road up there didn't they?
A. No special instructions.
Q. No special instructions?
A. I always look out for such things as that in making railroad locations.
781 Q. That was what they were worried about was that the county road would be stopped up there?
A. I don't know as they worried about anything.
Q. You don't know as they worried about anything?
A. No.
Q. Well, you was looking after the interest of the county road up there?
A. Yes, sir; I will always look after the interest of all public rights when I am making a survey of a railroad.
Q. You was afraid the settlers up there might be cut off from communication with the rest of the world?
A. I wasn't afraid of anything of the kind.

Mr. WEDGWOOD: Now, if the court please, I object to this line of cross-examination. I asked him with reference to certain facts, and then he asks him what his opinion is. It isn't cross-examination in any sense.

Mr. HENDERSON: Well, I will withdraw that question.

Q. In surveying that line under the direction of the Rio Grande railroad did you take into account in any way the convenience of the public, or was you doing it in the interest of the public in any way?

A. I took into consideration the convenience of the public.

Q. Yes, and the rights of the public?

A. Yes, sir.

Q. And you felt you was trying to subserve their interest; that is the reason you went up there, was it?

A. Whose interest?

Q. The rights of the public in that road?

A. I didn't go up for the interest of the public anything of the kind, I went up there and was prepared to recognize the rights of the public.

Q. You went up there under the directions of the Rio Grande railroad, simply to survey a line of railroad through there, didn't you?

A. Yes, sir.

Q. And that was all?

A. Those were my instructions.

Q. You didn't go up there to build a county road of course?

782 A. No, sir; excepting where we destroyed it.

Q. Except where you destroyed it?

A. And expected to rebuild their road in places.

Q. Have you run a level around the canyon on the level of the 25-foot dam?

A. No, sir; I haven't run any contour line on the 25-foot.

Q. You haven't run any contour line?

A. No, sir.

Q. You are only guessing that I suppose?

A. Well, I judge from notes I have on the profile. I can establish different points on that from the profile.

Q. You can establish that from the maps?

A. At different points I can establish it.

Q. How far up the canyon, if you know, going over a raise of 25 feet at Hanging rock and then running on the dead level, at what point would you reach your present road, the road as at present surveyed?

Mr. WEDGWOOD: Let me ask you, Judge, do you mean from the water?

Mr. HENDERSON: Well, I mean going over a dam or raise of 25 feet high at Hanging rock.

Mr. WEDGWOOD: From the water as shown on the profile?

Mr. HENDERSON: Yes, as shown on the profile.

Mr. WEDGWOOD: From the water?

Mr. HENDERSON: Yes.

The COURT: I suppose, Judge you mean a reasonable height of the water?

Mr. HENDERSON: Yes, I mean going over the water, a reasonable height, four or five feet, enough to protect it from the water, where would you come back to your present level?

A. Where would I come back to our present grade level, is that the question?

Q. Yes.

A. In a little more than a mile.

783 Q. A little more than a mile?

A. Five or 600 feet over a mile.

Q. And how far is it from Hanging rock up to South fork?

A. Over 3,000 feet; 3,500 feet.

Q. It is about a little over half of the way?

A. Yes, sir.

Q. Now, I think you stated that your present road-bed was calculated to be about thirteen feet above the water?

A. Well, from 11 to 13 feet above the ordinary flow of the river.

Q. Yes, from 11 to 13 feet above the ordinary flow of the river; of course your road-bed wouldn't have to be raised 25 feet higher then?

A. No, sir.

Q. You have taken that into account then?

A. I have taken that into account.

Q. So that it would commence—the height of the water as it would be raised in the river, suppose a dam 25 feet high was erected in the river there, how much would that raise of the surface water if it was raised 25 feet above the ordinary stage; would that raise the water 25 feet?

A. Yes, raise it a little more than 25 feet.

Q. How so?

A. Well, the water flowing over the dam would increase the height a little.

Q. Well, isn't that taken into account?

A. Well, that would be but a little anyway; it wouldn't be a great deal except in time of flood.

Q. Then you would have the water to be contended against in that event; there would be a strip which would be represented something like this (illustrating) supposing this was Hanging rock; that represents 25 feet above or the height that you would have to raise your road, and it would run along there on a grade until it got back there; supposing that is the line where they would come together; it would be a wedge-shaped piece like that that would be

784 overcome, wouldn't it?

A. I didn't get the first part of that question.

Q. Supposing this is Hanging rock here, and that is the present road-bed, that is the present——

A. Yes, sir.

Q. And that is the one that would be required?
A. Yes.
Q. Then supposing between the two, supposing this here is the point where they come together, it would be represented by a space like that wouldn't it, coming together like that?
A. Yes, in elevation.
Q. In elevation; I am speaking in elevation it would be a wedge-shaped piece like that; in the South fork it would be in something about like that?
A. Yes.
Q. In the middle what would be the raise there?
A. At South fork?
Q. In the first place, how much would the raise be up here?
A. At that point?
Q. Yes.
A. It would have to be raised 16 to 18 feet.
Q. 16 to 18; that would be all that there would be there; now then when you got back to here how much would it be at South fork?
A. About 12 feet.
Q. How much did you say?
A. About 12 feet.
Q. About 12 feet; why it would only be about 16 feet down here, would it?
A. 16 to 18, I said.
Q. Well, 16 to 18; mean to tell me——
A. (Int.) Well, the road is almost level the first half a mile; only rises one foot in a thousand; that would be two feet in 2,000.
Q. You say it would be represented by about 12 feet there?
A. Yes, sir.
Q. About 12 feet higher up on that bench?
A. No it is in the bottom there.
Q. It is in the bottom; and crossing South fork it rises
785 more rapidly?
A. The present grade does, yes, sir.
Q. It will—it would be brought together up here; now this distance from there to the point where they come together, except where it approaches the South fork a little ways after that, runs along the side hill, don't it?
A. Yes.
Q. And much of the way the hill there is very steep, isn't it coming down?
A. Yes, sir.
Q. Most of the way?
A. Yes, sir; it is very steep most of the way.
Q. Very steep most of the way in there and the hills along up here have a rather a regular contour, don't they, along here, that is, in other words the south side of that canyon up there in that canyon, is a somewhat regular—keeps a pretty even course, don't it, on the south side?

A. Up to that rock point at the South fork from the Hanging rock, do you mean?

Q. Yes.

A. Fairly, yes.

Q. Yes; after you cross the South fork you strike again the same regular canyon wall?

A. We get into some cliffs after you cross there.

Q. Well, there are some cliffs that come out there, but I mean the general contour, I am not speaking of the little protuberances that come out along there, projecting out, but I mean the general contour, standing down and looking up the canyon the south side presents a pretty straight line, don't it?

A. The general contour?

Q. The general contour?

A. Yes.

Q. It is true isn't it that the hills up here are also steep as they come down, generally?

A. Not quite as steep as they are below, but pretty steep.

Q. Yes, pretty steep; and right at Hanging rock the hills there as they come down there at what angle do you think there above your road-bed there up for 50 feet, what angle do they stand?

786 A. Well, they vary greatly. The slope may be about one-half to one horizontal to almost the vertical position in some places.

Q. Well, on an average it stands pretty nearly that angle, don't it (illustrating)?

A. I think on an average it does.

Q. Just tell me what angle that is, if you please?

A. About 45 degrees.

Q. Well, don't you think that is nearer the perpendicular than 45 degrees?

A. Oh, it may be 50.

Q. 50. And the grading along in there to raise your road-bed that distance above along there, it would not be even 16 feet high there; it wouldn't be 16 feet up would it?

A. In places it comes right into the river——

Q. Well, I mean, I am talking about Hanging rock?

A. At Hanging rock?

Q. Yes?

A. Right immediately at Hanging rock it wouldn't be more than 16 feet.

Q. And for quite a little ways above that?

A. Well, it would be quite a lot more than 16 feet because our line is in the river.

Q. Well, there isn't many places along there where your line is in the river, is there, until you approach South fork?

A. There is three or 400 feet in the river.

Q. And that is running right around a sharp curve, isn't it?

A. No, sir, it is on the tangent.

Q. Where is that?

A. Just above Hanging rock there is a tangent.

Q. Show me where that is on that map?
A. Well, it is on the profile here.
Q. Well, I want to see it on the map here?
A. There it is.
Q. Now, isn't it true—do you make it a grade there is it a fill or——

A. It is quite a big fill.
787 Q. It is a fill?
A. Yes, sir.

Q. And that fill is simply a continuation of the hill right out isn't it? In other words the southeast side of the fill lays right against the hill, don't it?
A. The southeast end of it.
Q. The southeast side of it as you run up along the southeast side?
A. I don't know; I haven't got any grade built there and I don't know where the slope of the fill would come to.
Q. Well, isn't it true that the 14 feet wide right on the top of that grade will go right up to the hillside?
A. I am not prepared to say whether it will or will not.
Q. You are not prepared to say whether it will or will not?
A. No, sir.
Q. At that place it is a sharp rock point isn't it?
A. Hanging rock is.
Q. No, no, at that place where that is?
A. I don't know whether we are talking about the same thing. It is in the river where I am talking about.
Q. Well, that is above the rock?
A. Yes, sir.
Q. And it is where your road just skirts into the river?
A. Well, goes clear across the river in one place, about 150 feet above the Hanging rock——
Q. Just show me that on your map?
A. Well, I can answer now that it will not reach the south hillside.
Q. And that is only a small part of that tangent, isn't it?
A. There is a good deal of it won't reach. There is only a small part of it that is on the north side of the river.
Q. It just goes off a little there?
A. Yes, sir.
Q. And then it runs right back close to the wall, don't it?
A. After it goes up five or 600 feet it does.
Q. After it goes up five or 600 feet?

A. Yes, sir.
788 Q. Well, now just turn to that again and see if that is so:
A. There is where we were (indicating).

Q. You say it is five or 600 feet from there over to there? How long is that whole tangent there?
A. That is 500 but it strikes the ground again on the other side.
Q. That is the length of the tangent ain't it?

A. No, sir; it is 500 feet from Hanging rock until you strike the ground on the same side.

Q. Is that at Hanging rock there?

A. Yes, sir.

Q. Why, you don't cross the river at Hanging rock do you?

A. Just above Hanging rock.

Q. Just above Hanging rock; how far?

A. Oh, 150 feet above Hanging rock.

Q. On the north side?

A. Yes, sir.

Q. This is the north side, isn't it? I want the map for the south side; of course that is the one you laid out but didn't build?

A. I guess this isn't the right map.

Q. No, it ain't the right map; I thought I couldn't understand that; that is the first map?

A. No, this is right; this is the south side.

Q. Well, I don't understand that map?

A. That is the way it lies in relation to the cardinal points.

Q. Now, where is that place?

A. It is up here.

Q. Now, where is that strip?

A. Hanging rock is down here.

Q. Hanging rock is down here?

A. That is from here to here.

Q. And it crosses to the north side of the river?

A. On the sharp point there.

Q. Is that the river? What does that represent in there, that white, is that river bed?

A. No, sir; between the blue lines is the river bed.

Q. I know but what is that white?

789 A. That is merely the canyon and this black line with the dotted line next to it is the wagon road.

Q. That represents don't it the washed river bed, don't it?

A. Yes.

Q. So that the scheme, building that across there by building your dike for your road, will be to run it into that channel?

A. We expected to change the channel.

Q. Well, the bed of the road that you proposed to build at that point will simply turn the stream into the old wash, won't it, as shown on that map?

A. That is not the calculation; we expect to make a channel for it.

Q. Don't that map show the washed bed of the stream right along by the side of it already?

A. No.

Q. Isn't it true that there are many places up that river where in ordinary water that the stream runs along and the water in places where for considerable distance it is bare stones, showing that it is the bed of the river, and when there is high water that it flows over there?

A. That isn't that kind of a place.

Q. That isn't that kind of a place?
A. No, sir.
Q. What makes you think it ain't?
A. Well, because I know that the ground, I know that the soil there is good; and a good deal of brush there.
Q. You know that there is soil there?
A. Yes, sir; sand and soil.
Q. What makes the road skirt around the way that was?
A. The reason the road runs across the river there is——
Q. No, no, I don't mean that road; I mean the wagon road.
A. They built the wagon road next to the hill to avoid cutting brush, I suppose, and kept up next to the hill.
Q. It is built right around that place, isn't it?
A. Yes, sir; it is built right around that place.
790 Q. And that road is how far from this point here?
A. It is marked on the profile; with that scale 60 or 70 feet.
Q. There is much of that distance with that 25-foot, would be absolutely on that same 200 feet that you are claiming now, isn't it, much of that distance would be, to build that road up there 25 feet?
A. Yes, a good deal of it.
Q. And it would be all on the same quarter section, wouldn't it, it would not change the——
A. (Int.) If I could see the map, I don't know whether it will or not. There is a question at the upper end whether it would be or not on the same forty in the same place.
Q. At the upper end, where?
A. Upper end of the Ferguson place.
Q. Through the quarter sections?
A. Oh, in the same quarter sections?
Q. Yes?
A. Then I will withdraw the answer; yes, sir; it would be all in the same quarter sections.
Q. And there is no place but what it would be on the same forty, you can see that clearly and positively?
A. Excepting one point.
Q. One point, and that is right at the upper end?
A. Yes, sir.
Q. And it is all unsurveyed public domain up there isn't it?
A. Unsurveyed, yes, sir.
Q. Let's see, was you the one that directed the change from one side of the river to the other?

Mr. WEDGWOOD: Object to that as not proper cross-examination. It has all been gone into anyhow, and I object to it as not proper cross-examination.

Mr. HENDERSON:

Q. Very well, I will call your attention to that map to the place where the present dam is. Do you know that, where the present dam is?

A. Yes, I know where it is.

791 Q. You know where it is; and how closely—I suppose that map represents approximately how close your road-bed runs to the river all the way up the canyon?

A. It does approximately.

Q. How is that?

A. It does approximately.

Q. Well, approximately, it shows that; I want to call your attention to the—it is close is it, it is close to the river all the way up?

A. Depends on what you call close. Fairly close to the river. Some places where it is a hundred to 200 feet from the river in places.

Q. In places, but they are only short places where that occurs, ain't they?

A. In general the road is quite close to the river.

Q. Close to the river; and at the place where their present dam is it is right close to the river isn't it?

A. No, I don't think it is.

Q. Well, how far from the bank of the river?

A. Oh, I think it is 50 feet, something like that. I was up there yesterday.

Q. Fifty feet from where their present dam is?

A. From the water surface?

Q. From the water surface?

A. Over to our center line.

Q. Does your road run right through the excavation that they have made for building the dam?

A. I think it runs a little above it.

Q. A little above it?

A. I believe it does.

Q. Doesn't run into that excavation?

A. I don't think it does.

Q. Did you run it yesterday?

A. I walked over the line yesterday, doing it hastily, and the brush was very heavy, and some of the stakes I did not find. Can't say whether I saw those particular stakes or not.

Q. Now, I want to call your attention to this particular thing that you have testified to. You heard Mr. De Moisy's testimony Saturday?

A. Yes, sir.

792 Q. About this being at this point marked 646.50 and going back over the line and saying that these were on the tangent?

A. I heard him say that, yes, sir.

Q. As near as he could tell by looking?

A. Well, he said they were on the tangent.

Q. He said they were on the tangent, and said—and I don't know but it was a point above that——

Mr. WEDGWOOD: No, that is the point, Judge.

Mr. HENDERSON:

Q. Is this the point?

A. That is the point.

Q. You heard him say that that point was on the tangent?

A. I think——

Mr. WEDGWOOD: I object to that as not the proper method of examination.

Mr. HENDERSON: I weill withdraw that.

Q. At this place right there you found a plug, didn't you?

A. Yes, sir.

Q. Driven firmly into the ground?

A. Yes, sir.

Q. Yes, a plug and a tack in it?

A. Yes, sir.

Q. That indicates that it is a permanent point, and that the plumb bulb had been set over it, did it not?

A. Doesn't indicate—I suppose it is permanent, but doesn't indicate that it was set for the purpose of permanent use. If we ever drive plugs for temporary use we call the chainmen up there and call the point and they put the plug in there without knowing what it is for, whether it is permanent or temporary.

Q. You saw a plug there and a tack in it?

A. Yes, sir.

Q. That indicated with exactness where a particular point was on that line?

A. Yes, sir.

Q. You say you didn't find any stake yourself planted there?

A. I don't think I found a stake laying there.

Q. The other gentleman Mr. Norris first had it in his hand
793 when you saw it?

A. I think so.

Q. And that you found was on the tangent, didn't you?

A. No, it was in his hand; I don't know——

Q. Well, I mean the plug.

A. The plug was on the tangent, yes, sir.

Q. The stake he had in his hand was only on the tangent when he was on the tangent of course?

A. Yes, sir.

Q. Now, what was that stake marked, 666.50?

A. Well, I think that was all it had on it. I know there was nothing back of these numbers.

Q. That was all that there was marked on that stake; and it indicated the number of the station, didn't it?

A. Yes, sir.

Q. That it was station 66 plus 50?

A. Yes, sir.

Q. And you say that you found a place out here, how far out?

A. Oh, I didn't measure it, I think it was about four feet.

Q. About four feet, you didn't measure it; just simply went out there and found this soft place?

A. No, I didn't do it that way.

Q. How did you find it?

A. I had the chainman hold the middle of the hundred-foot chain at station 666, I took the front end of it and with some kind of an appliance to use for sighting, directed the transitman who had his transit set up at station 665 plus 36, and turning the proper deflection for that stake he put me on the line; and in the meantime Mr. Norris had come over there: I said "The stake was up here," or "Here is the place for the stake," and took the stake and pointed it to the ground, and took hold of it and pushed it down. Didn't see any hole; but pushed it down and it embedded into a hole about eight inches deep, and the stake fitted the hole.

Q. Yes, of course; there was no apparent hole on the top?

A. No, not on top.

794 Q. And you would simply push it into the soil as it looked——

A. What was apparently a hole.

Q. What was apparently a hole; what is the character of the ground? That is very close to the river bed, isn't it?

A. About four or five feet from the river.

Q. Four or five feet away from the river, you mean vertically?

A. And it is six or eight horizontally.

Q. And you put that stake in there, and you thought that was where it ought to be?

A. Well, I found the hole where it ought to be by transit; he put me on line in position for that stake, and I put the stake in there.

Q. And it went down?

A. And it went down.

Q. Well, I say then it was in its place?

A. Yes, sir.

Q. Now, that is all you know about its ever having been set up there is what you state?

A. Excepting that I was present when the line was originally run, and know that we set all the stakes on the curve properly.

Q. Can you swear now that that stake was set there, from your recollection?

A. I can't remember of that stake being set at that point at that time, I don't know; nor I won't swear to the position of any one stake. I will swear that all of the stakes that we were running a curve line and put all of the stakes on the curve.

Q. Now, I want to ask you if this line of this curve was through underbrush?

A. Well, there is not much underbrush from station 665 plus 36 to the river, there was quite heavy brush but it had been cleared out, was cleared out at that time.

Q. Number 666?

A. 665 plus 36 to this point.

Q. Where is that, on the curve or the tangent?

A. Well, they are practically the same point; the line is now clear from 665 to the river.

795 Q. Well, what I mean is, on the tangent or on the circle?

A. Well, both, you can see through there, well, up through here.

Q. Isn't it true that that underbrush and cutting there runs on an angle?

A. At that place?

Q. Along on this angle?

A. No, sir.

Q. That isn't so?

A. With the exception that it runs at an angle between stakes, and even between hubs; there will be two or three lines cut out where it deflects; we have to cut out lines for each deflection, cut out in that way.

Q. And there was a line cut out was there around the angle at each line?

A. Which would approximate very closely with the way it curves.

Q. Standing as you said before there was any stake set up there at all, how many stakes were visible to this point.

A. When I first struck the line I came down here, and after returning here, for I had the instrument set up here, I walked up here and could see three stakes. A man standing here I don't know whether there were any other stakes visible or not.

Q. Well, I mean without the instrument?

A. Without the instrument, yes, sir.

Q. You could see this stake yourself plainly?

A. Yes, sir.

Q. That is only about eight inches off?

A. About that, yes, sir.

Q. And could see this one, while the instrument being over it, the plumb bulb being over it?

A. Of course I could see where it was. I could see the grade stake.

Q. Well, you couldn't see the stake?

A. No, a man couldn't see a stake driven right down to the ground.

Q. That is what I say, you couldn't see the stake driven down here?

A. Well, I could see this grade stake.

Q. You could see the grade stake?

A. And it is possible, I think you could see the next station back here, 670.

796 Q. You heard Mr. Norris state how you found the place where this ought to have been; you heard him state?

A. I was here; I don't know exactly what he said.

Q. Did you find this stake 668.50?

A. Yes, sir.

Q. You found that; how did you find that?

A. Why, we went down over the line and found the stakes, and then coming back we went to it again after we had the instrument set up, deflected for it and found the stake set up.

Redirect examination.

By Mr. WEDGWOOD:

Q. Mr. Baxter, do you know whether there was or was not a hole in the ground at 666.50?

A. I know there was a hole there.

Mr. HENDERSON: Mr. Wedgwood, I have got two or three more questions to ask him. I will ask him now so as you can close it all up.

Q. Mr. Baxter, can station 668.50 be seen from 665.36?

A. I do not know.

Q. You don't know; you wouldn't say that it could?

A. No; I couldn't stand at 665 and see it.

Q. Why was no hub put on at 666.50?

A. Because it would be extremely inconvenient to run a curve in that way. I could run a curve that way, but it would not be the usual way for setting—or for running that curve. If it were a regular curve that would be the proper way to do it.

Q. Well, why isn't that a regular curve?

A. Because it is a combined curve, consisting of a deflection and a spiral, and you couldn't make a regular curve.

Q. Do you build regular curves much now in railroad building?

A. Regular curves?

Q. Yes.

A. Yes, sir; this is a regular curve (indicating).

797 Q. To be regular you put a spiral at the end of it, don't you?

A. Yes, sir.

Q. But why wasn't a hub set there at the curve?

A. Because it would be of no use in running the line.

Q. Be of no use in running the line, that is the reason for it?

A. Yes, sir.

Q. What is the reason for going way beyond the curve and tangent to locate 668.50?

Mr. WEDGWOOD: Plus 5, that is what the testimony shows.

A. Going away from what?

Mr. HENDERSON:

Q. What was the reason for going way beyond the curve, going on the tangent and locating a hub there instead of locating it right at 666.50 plus 5?

A. That hub was set for the purpose of giving the point of intersection between the two tangents.

Q. It was for the purpose of giving the basis from which to reckon that curve if you wanted to, wasn't it?

A. Yes, sir.

Q. It was for the purpose of preserving the angle on the tangent so that that curve could be determined at any time from that; that was the purpose, wasn't it?

A. Well, you could hardly determine—it would be quite inconvenient to determine the curve from that point. It would be almost as bad as this point. It could be done, but would be—I wouldn't establish the curve from the hub in there.

Q. Well, it was set there for that purpose, wasn't it?

A. It was set there to produce that tangent.

Q. To continue the tangent?

A. Yes, sir, by an intersection.

Q. It was set there then for the purpose of continuing it there to the intersection of the angle?

A. Yes, sir.

Q. On the tangent?

A. Yes, sir.

Q. Where the tangent would come together at an angle?

A. Yes, sir.

798 Q. At an acute angle, and that was for the purpose of preserving a record, and marking on the ground from which the spirral or tangent could be figured?

A. That was done before we figured. That would be done before we did any figuring.

Mr. WEDGWOOD:

Q. I will ask you whether you are prepared to say whether there was a hole where the stake had been, in the proper place on the spirral of 666 plus 50?

A. I will swear that there was a hole at that place in which the stake fitted.

Q. Now, what was the character of the ground with relation to a stake dropping into it right there?

A. Well, after putting the stake into that hole, I pulled it out and prodded all around the neighborhood there and couldn't get it to go in anywhere else without using considerable force, using two hands and then I couldn't make it go down that deep.

W. B. DOUGALL called and sworn in rebuttal.

Examined by Mr. WEDGWOOD:

Q. Mr. Dougall, where do you live?

A. Springville.

Q. What is your business?

A. Civil engineering.

Q. How long have you been to work in that business?

A. Since I graduated in '94.

Q. You graduated from a school in civil engineering and surveying?

A. Yes, sir.

Q. Now, I will ask you if yesterday you were up Provo canyon?

A. I was.

Q. Were you up to—do you know where the Ferguson land is?

A. Well, I saw a place that they said was the lower edge
799 of the Ferguson farm; that is all I know.

Q. Well, I will ask you if you were at a point on the railroad survey marked 666 plus 36 P. S.?

A. Yes, sir; I was; that is 65 plus 36.

Q. 665 plus 36; you found that did you?

A. I saw it; I wasn't the one that found it.

Q. Now, tell what you did there with reference—well, I will ask you the question, did you have an instrument with you?

A. Yes, sir.

Q. A surveyor's instrument?

A. Yes, sir.

Q. Such as is usual in running curves?

A. Yes, sir.

Q. I will ask you if you run the curve from 665 plus 36 through to 669?

A. I tested it.

Q. You tested it?

A. Yes, sir.

Q. What do you mean by testing it?

A. Went and turned the angles to those stakes to check them, to see if they were on the curve that the notes showed.

Q. You had the notes, did you?

A. Yes, sir.

Q. What did you find?

A. I found that they checked.

Q. Found that they checked?

A. With the exception of that plug, that was on the tangent.

Q. Well, I will ask you about that?

A. And of course there was no stake at 666 plus 50, until it was put there; but I gave the line for the stake to be put and they showed me the hole where the stake was—well, it didn't require any effort to put it into the hole.

Q. You saw that place, did you?

A. I saw that place, after they found it and inserted it.

Q. Where was that hole with reference to 666 plus 50 as shown by the notes?

A. It was the proper place for it, they tallied.

Q. They tallied?

A. I gave him the line with the transit, and he said "Here is the hole."

800 Q. Now, I will ask you if you ran the tangent from 665 plus 36 to 666 plus 5?

A. I turned on the tangent.

Q. You turned on the tangent?

A. Yes.

Q. And what did you find with reference to that tangent, the position of 666 to be?

A. Why, 666 was on the spirral curve.

Q. And how far from the tangent line?

A. About seven or eight inches.

Q. Seven or eight inches; now what would be the distance from the tangent line to 665 plus 50?
A. The proper distance?
Q. Yes.
A. At an offset?
Q. Yes.
A. About four feet.
Q. 665?
A. Oh, 665 plus 50?
Q. Yes.
A. It would be a quarter of an inch.
Q. Would that be enough to be shown by a stake?
A. Would not be appreciable.
Q. Now, I will ask you if a man with an instrument could tell whether 665 plus 36, 665 plus 50, 666 and 666 plus 50 plus 5 were not on a straight line?
A. Not only could he tell with an instrument but if he would stand on a point so as to determine the exact location of those plugs, he could see it with his eye, without an instrument.
Q. You think an experienced man could see there and see these stakes, and sight along these stakes, and could tell they were not on a line?
A. Yes, or a non-experienced man.
Q. Or a non-experienced man?
A. Anybody could see that that had any eyes.

Cross-examination.

By Mr. HENDERSON:

Q. You live in Springville?
A. Yes, sir.
Q. How old are you?
A. Twenty-five.
801 Q. You graduated when?
A. '94.
Q. '94, and what have you been doing since?
A. Principally following engineering; and part of the time I have not been at it.
Q. And surveying some?
A. Yes, sir.
Q. Surveying mostly?
A. Yes.
Q. You went up there yesterday with Baxter and Norris?
A. I went up there after they had gone. I came up there and found them there.
Q. Well, you was up there by appointment with them?
A. Yes, sir.
Q. And was with them?
A. Yes, sir.
Q. Now, where did you set up your instrument?
A. I set up my instrument at 665 plus 36 at the P. S. there.

Q. Is that where you took the deflection to show you where that point should be?

A. Yes, sir.

Q. How far are they apart?

A. 114 feet.

Q. 114 feet; he stood up there, I suppose and had something to attract, so that you could see it?

A. He had a flag-pole.

Q. Had a flag-pole?

A. Yes.

Q. And you told him when he was at the proper deflection, and found the place?

A. Yes, sir.

Q. And that was after the stake had been found?

A. I didn't hear him say anything about the stake until after I had given him the line.

Q. Well, didn't you hear anything said about finding a stake over here?

A. After I had given him the line—he was chaining through; he first chained here, and then had chained that one (indicating) and then he went up here, and I gave him the line there, and then I think Norris walked up, and picked up a stake and showed
802 to him, and he says "Here is the hole," and put the stake in it.

Q. And stuck the stake in it?

A. Yes, sir.

Q. You was over there with the transit?

A. Yes, sir.

Q. And you was standing over here to give him the proper deflection?

A. Yes, sir.

Q. And that was before you gave him the proper deflection that you heard about them finding the stake?

A. I don't recollect about that.

Q. Well, then he said, after you had given it to him, he says, "Here is the hole"?

A. Yes, and he had the stake in his hand when he said "Here is the hole."

Q. He had the stake in his hand?

A. Yes, sir.

Q. And he says "Here is the hole"?

A. Yes, sir.

Q. And he put the stake in it?

A. Yes, sir.

Q. Put it right down; you wasn't there then?

A. I wasn't there then.

Q. You didn't see it until after he had put the stake in and taken it out again?

A. No, sir.

Q. And then you saw the hole?

A. Yes, sir.

Q. And then the stake seemed to fit it?
A. Yes, sir; seemed to fit it.
Q. Seemed to fit it remarkably well?
A. Well, didn't seem to require any effort the first time.
Q. Didn't seem to require any effort the first time?
A. No, sir; from the way he spoke.
Q. Oh, you could tell from his voice?
A. Well, he seemed to be a little bit surprised that he would find the hole at all.
Q. Well now, the real thing about that is that you took his statement for it, didn't you?
A. Oh, yes.
Q. You couldn't swear to that as a fact, could you?
A. Nor am I doing it.
803 Q. How is that?
A. Nor am I doing it.
Q. Nor you didn't mean to do it?
A. No, sir.
A. I understood you to say that he found the hole and it went in there without any effort at all, but that was from what he reported, from what they said to you?
A. Yes, sir.
Q. Let's see; it was 114 feet away that you was?
A. Yes, sir.
Q. And there was brush along there?
A. Well, I couldn't say, but the brush had been cleared out.
Q. Well, it is on that line right through there?
A. Yes, sir.
Q. So that you could see him clear down to his feet?
A. Well, perhaps I couldn't see his feet from brush that was laying between us.
Q. Yes; there was brush laying between you?
A. Yes.
Q. And the ground was a little uneven there?
A. Yes, sir. I didn't notice his feet specifically.
Q. No, and you didn't see the ground where he put the stake down?
A. No, not from where I was.
Q. No, you couldn't see the ground from where you was, I know. That is all you can say about it is just what you have stated?
A. Yes.
Q. That is all—just one further question, how much did you deflect your instrument when you stood back there and deflected?
A. I don't remember, I will have to have the table of spirrels.
Q. Well, how did you find it?
A. The deflection?
A. Yes.
A. Why, for the 15-foot deflection in a 114 feet there would be seven to nine feet, probably seven and two-thirds deflection; and I simply took the table that is given for spirrels and turned off that deflection.

Q. There are working tables which figure out each formula, isn't there?

A. Figure out the formulas for turning these spirals, yes, sir.

804 Q. And they gave you and you took their statement for the formula which had been followed?

A. The tables of deflection?

Q. Yes.

A. Yes, sir.

Q. They told you which?

A. Yes.

Q. And when they told you then you set up the instrument there and took the deflection according to what that statement was?

A. Yes, sir.

Q. Now, that was all the basis that you had for it?

A. Yes, sir; that is the basis that is always used in spirals curves.

Q. Well, always used, is it?

A. It is always used on railroad work, that I have ever seen. Sometimes they will use what they call the "cubic parabola," I think it is sometimes called, but that isn't usually adopted. This is very much shorter.

Q. Well, that is used sometimes; there is different forms used isn't there?

A. But this is the general, the one that is universally adopted.

Q. You say it is universally adopted?

A. I say it is universally adopted.

Q. How much railroad experience have you had?

A. Well, perhaps two years.

Q. Two years of railroad experience?

A. Yes, sir.

Q. And in running these curves?

A. Yes, sir; I never saw an engineer running any other spirals or any other system used.

Q. Is that formula always used, no matter what length of curve is used?

A. They give different lengths of the spiral cords, but they use that system.

Q. They use that system?

A. Yes, sir.

Q. Well, but I mean the angle at which the curves occur; in other words that system settles on turning a curve what you have, what curve you make to get around a tangent here to a tan-

805 gent there, to start out and make it come out more gradual, and finally reaching the curve, and run on that for a time, and then come out more gradually, and come out on to the track here; that is the point of it all?

A. That is the point.

Q. Now then, in starting at the first deflection for running a certain distance, at a certain percentage——

A. They run a certain distance at a certain deflection.

Q. They run a certain distance at a certain deflection, but the deflection is always the same?

A. Doesn't make any difference what the grade is.

Q. Is the length at which they run it always the same?

A. No, no.

Q. So that it would complete the circle quicker on some measurements than on others?

A. Yes, sir.

Q. Well, now, as to what that was, as to what the length was, you took their statement for it?

A. I took the notes that they had in there.

Q. Yes you took the notes that they had; in other words, I don't mean to say that their statements were not correct, but you took such data as they gave for it.

A. And tested the stakes that I found in the field by that data.

Q. Yes, and tested the stakes that you found in the field by that data?

A. Yes, sir.

Q. And according to that you gave them that deflection?

A. Yes, sir.

Mr. WEDGWOOD:

Q. Now, what tables did you use?

A. What is that?

Q. Now, what tables did you use?

A. I used Searle's railway spirrals.

Q. Well that is the universally adopted book, isn't — by
806 up-to-date engineers?

A. Yes, sir.

Q. That is common property for anybody that will pay their money and get it?

A. I never saw anybody that knows anything about railway work or professes to do anything in railroad work that didn't have it.

Q. Now, I will ask you if the stake here, 665 plus 36 marked 10 15, didn't give you all the data that was necessary for any engineer to have?

A. Yes, sir.

Q. To run that spirral?

A. Any engineer that had ever used a spirral, a stake like that would indicate exactly what to do to find the line.

Q. So you wouldn't have needed any one to have to tell you anything else?

A. I wouldn't have needed anybody to explain what that meant. I would have known how to retrace the line if they had not been there. I could have taken inexperienced men and found that line from that data.

Q. Anybody could have retraced the line from what was on the stake 665 plus 36 P. S., from Searles' tables?

A. Yes, sir.

Q. So you did not rely upon the Rio Grande men for any element in retracing that?

A. All that I relied upon them for is to see that the notes that they said had been shown in their survey, agreed, checked with the stakes that I found in the field.

Q. These field-notes agreed with the work?

A. Yes, sir.

Q. From 665 plus 50 P. S. 10 15?

A. Yes, sir.

Mr. HENDERSON:

Q. What was on that stake that told all that story?

A. Why the station number, 665 plus 36, gives the comparative position of the stake with reference to other stakes, and the P. S. means point of spir*z*l, and the 10, 15, means that there are ten cords fifteen feet long used to approach a certain curve.

Q. Well, was that on the stake?

A. Yes, sir.

807 Q. Now, you could take that figuring and if there wasn't a stake on that line you could locate that spir*z*l, couldn't you?

A. Yes, sir.

Q. So that the fact as to whether there was stakes there or not along there, if you was running over it and had established the points before you would say that the work had been right?

A. If I found the stake was in the proper position and there was no appearance of it having been moved, I would say that that was right

Q. Yes, and if there wasn't a stake there you could run that spir*z*l, couldn't you?

A. Yes, if I had a point on the tangent to establish a point from. You couldn't do it from that point, because you might run off a million different directions.

Q. I mean that and take the points above it?

A. Yes.

Q. So that whether there was or was not stakes you could run it by simply taking the tables and fixing the deflection?

A. Yes, sir.

Mr. WEDGWOOD:

Q. I want to know, Mr. Dougall, if that stake here on that tangent marked as it was, and the next stake, that is 665 plus 50, and 666, and 668 plus 50 and 669 would show a competent engineer whether or not they were on a curve?

A. Why, yes, they would show a competent engineer or a man that need not be very competent; a man that understood anything about it could see that those stakes were on a curve by testing them with the instrument.

Mr. HENDERSON:

Q. Was there anything to show the degree of curve on the stake?

A. Yes, sir.

Q. That was these figures?

A. Yes, sir.

Q. And that was all?
A. Yes, sir.

808 Mr. WEDGWOOD:

Q. That was enough, was it?
A. That was sufficient there.
Q. All that was necessary?
A. Well, there was the ten fifteens that is the spiral that is usually used for approaching a 12-degree curve.

Mr. HARKNESS: I offer in evidence the certificate of the incorporation of the San Miguel Consolidated Gold Mining Company; certified by the secretary of the State of Colorado.

Mr. HENDERSON: I object to it as immaterial, is all; I don't see the materiality.

Mr. HARKNESS: It isn't material of itself, but I expect to follow it.

The COURT: It would be taken subject to that.

Mr. BAILEY: I would like to inquire what this is in rebuttal of and what the materiality is.

Mr. HARKNESS: The rebuttal is that they claim an appropriation of land and water and I don't know what all, in the name of the Telluride Power Transmission Co., and this is to show that they haven't any such power in the articles of incorporation whatever.

Argued to the court.

The COURT: Let it be admitted.

Mr. HENDERSON: Give us an exception.

Mr. HARKNESS: The amendment of the articles of the company were made on December 30th, '95, the last day of the year '95, filed in the office of the secretary of the State of Colorado the 15th of February, '96, and recorded *and* etc., certified by the secretary of the State of Colorado, the amendment is this: "Know all men by these presents, that at a special meeting of the stockholders of the San Miguel Consolidated Gold Mining Company, duly called for
809 the purpose of changing the corporate name of said company, held on December 30th, at its office in the town of Telluride, in the county of San Miguel and State of Colorado, more than three-fourths of all the stock of said corporation then subscribed in good faith outstanding being present and voting at said meeting, the following amendments of article one of the articles of incorporation of said company received the unanimous vote of the stock present at said meeting: Article 1. The corporate name of said company shall be the Telluride Power Transmission Company. In testimony whereof," etc.

Mr. HENDERSON: Now have they both been received?

The COURT: Only one was received subject to proof.

Mr. HENDERSON: If the court please, I want to put upon record to this last one and to both of them this objection. I say they are immaterial. Of course if they are offered for the purpose of affecting the original location that might be another thing, but it isn't offered for that purpose. It is offered for the purpose of showing

that the Telluride Power Transmission Company couldn't hold property here, because it is outside of its business.

The COURT: Here in this State?

Mr. HENDERSON: Here in this State. That is for the purpose; in other words, that it is *ultra vires* for this incorporation. Now, I object to that upon the ground in the first place there is no testimony here tending to show an appropriation by them; the appropriation was by Mr. Nunn; whatever interest they have got they take by contract from him, whatever that contract is no matter, and in this case it isn't for them to say. That it is *ultra vires;* in other words, I can't go—if the railroad company. If I could prove that they were not authorized by their articles of incorporation to purchase a certain class of cars that they have got, it won't authorize me to go and take those cars and take them away; that is a matter of
810 theirs and whenever it comes in question properly can be offered; the State may question it and under certain circumstances there are parties that may question it, but I can't question it in that way; and here where it is claimed that the Telluride Power Transmission Company have got an interest in the property up here, these people can't come and take it from us, and when an action is tried in relation to it say, why you were not in existance, you are free plunder for anybody. It can't be raised in that way. That is the objection that I make to them. Of course the effect of it—I want it to go on record what this is, but the effect of it can be determined hereafter.

The COURT: Of course it should be and is permitted to be introduced here with the understanding of its application hereafter——

Mr. HENDERSON: Yes.

The COURT: Let it be introduced, or let it be admitted.

Mr. HENDERSON: Give us an exception.

Mr. HARKNESS: I offer a certificate of the secretary of the State of Utah that neither the San Miguel Consolidated Gold Mining Company or the Telluride Power Transmission Company has filed in his office any resolution of the board of directors of either of said companies, or any paper purporting in the name of said companies or either of them to accept the provisions of the constitution of the State of Utah designating any agent in Utah upon whom process may be served.

Mr. HENDERSON: Object to it, if the court please, upon the same grounds.

The COURT: The same ruling.

Mr. HENDERSON: And an exception.

(Articles of incorporation above referred to marked by reporter "Pl'ff's Ex. 9, D. H. R.;" amendment marked "Pl'ff's Ex.
811 10, D. H. R." and certificate marked "Pl'ff's Ex. 11, D. H. R."

Mr. HARKNESS: I offer from the General Statutes of 1883 of Colorado, page 80 and 81, general section 238 in regard to corporations generally, and which among other things provides, that when any company shall be created under the laws of this State for the pur-

pose of carrying on any part of its business beyond the limits thereof such certificate should state that fact, and should also state the name of the town or county in this State, etc., in which the principal office should be.

Mr. HENDERSON: Object to that for the same reason, it is wholly and absolutely immaterial.

The COURT: The same ruling.

Mr. HARKNESS: Also offer page- 201 and 202, general section 320, which shows the power of mining companies in the State of Colorado.

Mr. HENDERSON: Same objection to that.

The COURT: Same ruling. What year were those acts that you speak of?

Mr. HARKNESS: It is of 1883, I have the compilation of 1889 here and they are the same. The statute under which the corporation was organized was the one of '83. We now offer in evidence the judgment-roll in the case of The Rio Grande Western Railway Company against The Telluride Power Transmission Company, Nunn and others, which has already been admitted in a limited way. I offer it now generally.

Mr. HENDERSON: Well, for what purpose?

Mr. HARKNESS: For the purpose of showing that this same question was tried in that case, it being conceded that land adjoins this in regard to this dam, and decided. And also to show that the injunction granted in that case is still in force. I will say in regard to this, that perhaps your honor wouldn't care to rule upon it now.

812 The COURT: I would prefer some little time to look that up.

Mr. HARKNESS: And I would make this remark in regard to it, that the supersedeas bond granted is absolutely void in this case, and the order granting it.

The COURT: The proof was before the court that that was granted.

Mr. HARKNESS: Yes, but it wasn't necessary in the appeal that it should be so ordered; and in the face of all the facts so far as the granting of the supersedeas was absolutely void, and secondly upon the ground that no writ of error from the Supreme Court of the United States can stay or effect the judgment of this court.

The COURT: Let me ask, Judge Harkness, have you any other matter to introduce; it is hardly time to adjourn court without that is the last. The court would like some little time to consider that matter, and would like to hear from you gentlemen on that.

Mr. HENDERSON: Yes, and I will state to counsel the objection that I have to it. In the first place upon the broad ground that Judge Harkness states that it is the same question; it is not the same question. The same question is not involved in this case that was involved in that; that was a bill as I understand it to quiet title, or ejectment equitable ejectment for that land. This is to condemn a piece of land, the title of which by that very act of bringing it is in us. They can't resort to the extraordinary remedy of

taking one man's land and forcing him to sell it to another, and if they resort to that, they must show that they have owned it all the time; they don't need to exercise that power. I object to it upon that ground that it is not the same. In the next place, that it is not plead in this case, and in the next place that it is pending on appeal. It is not a final judgment, it is on appeal in the United States Supreme Court. Judge Harkness says that he questions this certificate of Judge Zane's. That cannot be questioned in
813 this collateral way. It has been appealed and is pending in the Supreme Court of the United States; and in the next place that it is immaterial, wholly immaterial to this controversy.

The COURT: Mr. Reporter, let me have if you can after the court adjourns the objections that have been enumerated by Judge Henderson. I can't note them down as rapidly——

Mr. HENDERSON: Well, that is all right. We shall argue this question at length, and at that time it may be stated more fully. I have an idea that we may close the testimony in this case by going along a few minutes, and then we can set time for argument.

The COURT: You rest, do you?

Mr. HARKNESS: Yes; and if I want to ask a question or two hereafter Judge Henderson will consent.

Mr. HENDERSON: Oh, yes.

CHARLES DE MOISY, called for defendants in serrebuttal.

Examined by Mr. HENDERSON:

Q. Mr. De Moisy, you was on the stand here day before yesterday and made a statement in relation to these stakes up there, about which there has been considerable controversy. Did you go back up there yesterday for the purpose of seeing what the condition was?

A. I did.

Mr. WEDGWOOD: We object to it if the court please as not being proper serrebuttal. They went into that whole question.

Argued to the court by respective counsel.

The COURT: Well, the court is not disposed to have this extend as long as the Cuban war. The court will hear the evidence without looking back, I don't remember—the court doesn't remember exactly which one now introduced this. It would be permissible anyhow by the court.

I think it is proper serrebuttal as near as I can remember
814 what the testimony was.

Mr. WEDGWOOD: We will take an exception.

Mr. HENDERSON:

Q. Now, Mr. De Moisy, this, I believe, here, a part of this map or plat there was drawn by you yesterday, and some of these others have been filled in since. Now I call your attention to station 666 plus 50, and ask you if yesterday when you was there, you, and the

day before you noticed a stake lying by the side of the plug that was in there on the tangent?

A. I saw it both times.

Q. Saw it both times. Now, I will ask you if on the day that you was there first or the day that you was there last you looked for any stake or any indications of a stake at the place or near the place where it would be?

A. Where it ought to be, you mean?

Q. Yes.

A. Yes, sir; I did.

Q. Did you find any?

A. I did not.

Q. Before you went up the last time state whether you had figured out according to that formula approximately at least the distance that that stake would be, or should have been from where the plug was on the tangent?

A. Before I went first?

Q. Before you went up the second time?

A. No, sir.

Q. Did you up there at that time?

A. No, sir.

Q. Did you know where it should be when you was there at either time?

A. Well, I had a range of four or five feet that I looked in, that I knew must be in it somewhere, but I didn't have it calculated accurately.

Q. But did you look at a point that would cover the place where it should have been?

A. Yes, sir.

Q. Did you find any indications of a stake having been there?

A. No, sir.

Q. Or of any stake being there?

A. No, sir.

Q. What was the indication of that stake that you found
815 lying there by that plug; how long did it indicate since it had been in the ground?

A. The stake I found laying by the hub had evidently been out of the ground for some time.

Q. What was there that indicated it?

A. Why, both ends of the stake show the evidence of being water-worn; the point of the stake that ought to have been in the ground was as clean as the upper end of it.

Q. Where was it laying when you first saw it?

A. It was laying about a foot from the hub, maybe ten or 12 inches from the hub towards the river; that would be on the left side as you go up.

Q. Would be on the left side as you go up. Did you leave it there?

A. I picked it up and examined the number, and read the stake and put it in just as near the same place as I found it as I could.

I may have altered it a little but it was laying about in the same place.

Q. Now, did you when you went up there yesterday notice as to whether there was cuttings of the brush around on this curve?

Mr. WEDGWOOD: That very question if the court please was asked by the judge himself.

The COURT: That was extensively gone into, Judge.

Cross-examination.

By Mr. HARKNESS:

Q. Mr. Demoisy, you picked up the stake and read the number of it?

A. I did.

Q. What was on it?

A. Written across the top of the stake was the letter P. followed by the figure 2; then reading down the stake was 666 plus 50.

Q. That 666 plus 50 was the right number for a stake on the spiral in the right place, was it not?

A. Just repeat that again.

816 Q. I say the number 666 plus 50 was the right number, right mark for a stake which should have set on the curve?

A. Yes, it was the right hub, as I found the hub. The number corresponded with the mark but the stake might have been put about that distance either on the spiral or any place else.

Q. Well, it would be a proper numbered stake to put on the spiral at that place?

A. Yes, sir; it would.

Q. And would it be probable that they would mark a stake properly and for the right place and then put it in the wrong place?

A. Well, I don't know about that. I didn't know at the time I examined it where the right place was. I judged where it ought to be when I came home.

Q. You judged that from the number, did you not?

A. Yes, well, it was in about the right place as to the number, as to distance, and that is all the stake indicates; it was put in the right place for distance.

Q. Well, on the tangent you found a stake there in position?

A. No, I didn't find—the stake was not in position, Judge.

Q. What?

A. I never saw the stake in position. It was laying by a hub.

Q. Well, what I mean is the hub?

A. Yes.

Q. You found the hub?

A. That was on the tangent.

Q. Now, this stake would have been very properly marked, or was properly marked for a stake set on the spiral right near that?

A. Yes, as far as numbering was concerned, it was properly marked.

Mr. HENDERSON:

Q. State whether it was properly marked setting right where it did set if the line of road went right on up there?

A. I think it was.

Q. Now, just state whether that hub if it was true that a line, or the road is intended to run around this curve, and it was
817 intended that that was the actual laying out of the curve, running the curve in, state whether that hub that you found there was in the proper place for it to be for that?

A. No, it wasn't on the curve.

Q. Well, was there a tack in the end of it?

Mr. WEDGWOOD: If the court please he went into that: that was the basis for that diagram, and I object to it for that purpose.

The COURT: Yes, you went into that.

Mr. HENDERSON: Well, I didn't ask him the question as to whether it was properly, the hub was properly in its place if a railroad was intended to run over here. I did ask him it is true if he ran that around there, and he said that there was no stake on the curve. That was the point that he stated yesterday.

The COURT: I don't remember just exactly what it was. I know it was quite extensively gone into in regard to that.

Mr. HENDERSON: Well, I don't care anything about it if he testified to it as it was.

The COURT: Anything further?

Mr. HENDERSON: I will ask you, Mr. De Moisy, if you yesterday had an instrument with you?

A. I did.

Q. What was it, a transit?

A. A transit.

Q. Now, I want to know if standing up there on the tangent at 666 plus 50, what stakes could you see looking down the tangent?

A. I could see 666—that is by looking back down the river that is, you mean, with the transit?

Q. No, no; with your naked eye.

A. I think I could see the top of 666.

Q. And could you see anything below that?

A. No, couldn't see anything above it; couldn't see 665 plus 50 nor the hub.

Mr. HENDERSON: Now that is all. Now, Mr. Yard isn't here.

Mr. HARKNESS: I think you can get him here in the
818 morning, if you want to, Judge.

Mr. HENDERSON: It is only a word; and Mr. Nunn isn't here; he has been busy at the office with some matters. It won't take time it is only a question or two, and it won't take five minutes.

The COURT: Then it will be apt to terminate with a few questions to Mr. Nunn and a few to Mr. Yard?

Mr. HENDERSON: Yes, sir.

Adjourned until Tuesday, April 26th at 9:30 a. m.

Resumed session.

The COURT: At the hour of adjournment last evening there was a question submitted to the court. I have had some opportunity to look over the matter. I understood that you gentlemen would like to be heard.

Mr. HARKNESS: Yes, I understood we had proposed a hearing.

The COURT: As to the admissibility?

Mr. HENDERSON: Yes, I supposed we would argue that on the requests.

The COURT: Yes, well, it was on the admissibility of the judgment-roll.

Mr. HARKNESS: Yes.

The COURT: Well, that can be determined afterwards.

Mr. HARKNESS: In the meantime our Exhibit 4 seems to be lost, I would ask leave to submit a copy except this has the words "Exhibit A" on it, one annexed to the pleadings, and it will not be in that respect the same, unless I strike out the "Exhibit A."

Mr. HENDERSON: Oh, yes.

The COURT: Is there objection?

Mr. HENDERSON: Oh no, none at all.

Marked "Pl'ff's Ex. 4, D. H. R." substituted for "Ex. 4."

Mr. HENDERSON: Now I would like to inquire, if the court please, if it is the purpose of the court to let the jury, or whether it
819 is the desire of the jury that they shall see the premises. Now we shall take some time in arguing to the court about the law of this case; during that time the jury don't need to stay here, while that is being done, and they can just as well go if they desire to, and we should like to have them on our part.

Mr. HARKNESS: We would like to know what the jury desire; we don't oppose anything of that kind.

(The jurors express a desire to see the premises, and it was suggested that a surveyor selected by each side should accompany them, together with a ba-liff, under proper instructions from the court.)

L. L. NUNN, recalled for further cross-examination.

By Mr. HENDERSON:

Q. In explaining the plan of the 85-foot dam I think you was not asked how long you expected it would take to construct such a dam?

A. I believe not, sir.

Q. How long would you contemplate it would take to construct such a dam?

A. We have handled about 2,000 yards a day in like plants——

Q. I don't care about the details.

The COURT:

Q. Give an approximation.

Mr. HARKNESS:

Q. If you can give the general time.

A. I will give it in a moment. It would take approximately about 400 days at the washing that I have mentioned.

Q. For the washing?

A. Yes, for the dredging down of the debris.

Q. I mean the entire structure?

A. Well, that is practically it; it would not take much more time than that.

Q. Don't you have any masonry work at all?

A. That would go up at the same time. The longest time
820 it would take would be dredging the debris down.

Q. Would that take approximately 400 days at 2,000 yards a day?

A. Well, that is approximately, yes; there would be sometimes it would not be that much.

Q. Could it be prosecuted continually or just in the summer time?

A. It could be prosecuted for eleven months easily enough. We have had a month that we have known that it could not be.

Q. You estimated about two years, didn't you, about a year ago?

A. Well, I don't remember. 400 days would be something over a year.

Q. Well, while you was dredging, you necessarily, I take it, would keep the water roiled, and roily?

A. Some of the water, yes, sir; not all of it by any means.

Q. Now, it is your plan as I understood before, that you would raise the dam in sections, rais- a part higher and then throw the water over that and then raise the other part; am I correct?

A. I don't think you understood me quite readily. As the bottom is filled up, of course it raises the water as it raises the bed of the stream; consequently it would only take an even amount of water at all points; because if you started with a force equal to a hundred-foot head, as the bottom of the canyon raises up, you would still get—use the same amount of force, and the water would rise with it.

Q. I did not make my question clear. I understood you when you was on the stand before, and you was asked what you would do with the water, you stated, you would raise one part at a time?

Mr. WEDGWOOD: That was to P. N. Nunn.

A. I think you misunderstood me.

Mr. HARKNESS:

Q. Oh, that was P. N.?

A. You were asking me questions with reference to the masonry foundation. Of course the dams would be made by turning the channel.

Mr. HARKNESS: I withdraw the question.

821 Q. Then if you raised it all up evenly, your water would have to go over it all evenly?

A. Just as it does in the bottom and the canyon. There would be no difference in that bottom and the other. It is the same plan that has been used in California where the bed is two or three hundred feet wide.

Q. Well, Mr. Nunn, I don't care to go into those questions; but that fill was to commence away below in the canyon and fill in back of your toe?

A. The natural way would be to wash the debris down and let it remain as nature left it flow down.

Q. Now, on the stand before, Mr. Nunn I understood you to say that you did not know that there was any conflict here until a quite a late date; my recollection is about August; am I correct about that?

A. I don't think I fixed a date, but I think it was earlier than August, but it was a late date. There was nothing except a meeting of the railroad folks.

Mr. WEDGWOOD: I think in July.

Mr. HARKNESS:

Q. That is what I want to call your attention to, whether you can fix that date or not, was it at Springville?

A. It was at Springville, yes, sir, it was on the cars.

Q. Gen. Palmer, and Col. Dodge, and yourself and Yard was there also?

A. Gen. Palmer and Mr. Dodge and Mr. Peabody, all three of them.

Q. And Mr. Yard was there also?

A. And Mr. Yard was there also, yes, sir.

Q. Have you any — to determine whether or not that was the 3rd of June?

A. Yes, sir; I think so. I think I have letters from Col. Dodge that would fix that date exactly.

Q. Fix that date exactly?

A. Yes; it was after my trip here in the spring, but it may have been a little earlier——

Q. (Int.) Well, now, Mr. Nunn, I don't care about that explanation; you now think it was the 3rd of June?

A. No, I think not.

822 Q. Well, do you think it was earlier than that?

A. I don't know, that is not fixed in my mind so that I can tell. I can fix it if you wish me to go to the office, I can fix it exactly.

Q. Well, if you would fix it exactly I would like to have you do so. I don't care to spend any time on it; that is all.

The COURT: Anything further?

Mr. HARKNESS: I want to call Mr. Yard unless Mr. Nunn can fix that date. I supposed he would be here.

Mr. HENDERSON: Well, Mr. Nunn says he can fix that date at the office.

Mr. HARKNESS: Well, if you will allow me to fix that date afterwards with Mr. Yard.

Mr. HENDERSON: Is Mr. Baxter or Mr. Yard here?

Mr. HARKNESS: No.

Mr. HENDERSON: Well, I did want to ask Mr. Baxter a question.

Mr. HARKNESS: Well, if we can get him here you can do that afterwards.

Recess taken for 30 minutes.

Resumed session.

E. J. YARD recalled for plaintiff.

Examined by Mr. HARKNESS:

Q. Mr. Yard, you have been sworn?

A. Yes, sir.

Q. Do you remember a meeting at Springville at any time in the year 1896 between Mr. Nunn, Mr Dodge, the general manager of the railway and Gen. Palmer and Mr. Peabody?

A. I don't remember whether Mr. Peabody was there, but Gen. Palmer and Mr. Dodge and Mr. Nunn were there.

Q. Do you remember what date that was?

A. That was June 2nd, '96.

Mr. HENDERSON:

Q. Well now, I want to ask Mr. Yard, I suppose Mr. Bax-
823 ter was going to stay, and I don't know but what he is the one that knows the fact.

Q. Are you reasonably well acquainted with the canyon?

A. Fairly so, yes, sir.

Q. Mr. Baxter testified here yesterday in relation to the raising of the water in the canyon, and about passing into the South fork; do you know anything about a trial that runs from just above the Bridal Veil falls up the side of the canyon up around to the South fork?

A. No, sir; I do not.

Q. Do not know that such a one exists, a foot or saddle trail?

A. No, sir; I do not know.

Q. You don't know?

A. No, sir.

The foregoing is all of the testimony given in said cause except exhibits.

Mr. HARKNESS: I believe we are through, your honor.

The COURT: Gentlemen of the jury; it is mutually agreed and understood by the parties in this action and acquiesced in by the court, that you gentlemen should visit and view the ground and points that have been testified about in your hearing; and the court will appoint Mr. W. K. Henry, deputy sheriff, as an officer to go with you, and in this as well as in other admonitions that the court had given you; you will of necessity have to make some in-

quiry with regard to different points and matters that you may desire to know, names of different objects, and other things of that nature to give you information; you should ask them of the officer. The court will likewise appoint and authorize the accompanying of two other persons, one selected by each side, who will be there for the purpose of informing the officer with regard to these matters, and he will give you the information; that obviates any communications between you and outsiders, and you will understand the relation between you and the officer is that all but of the court. He will communicate to you at least what he may gain
824 from them. Now is there any special instructions?

Mr. HENDERSON: Yes, if the court please, I ask that the officer take with him this blue print showing the 200-foot strip, and so that he may show the jury, and if he doesn't know about it, he can find out from the other gentlemen and then show to the jury the limits of the land, the lines that are 200 feet apart, so as to show the strip of land through there so that he will have it with him and can do that.

The COURT: There is no objection, I suppose?

Mr. HARKNESS: We have no objection. The jury understands that if the officer—if they want any information they inquire of the officer, if he don't know he inquires of the other men and then communicates with them.

The COURT: You gentlemen understand that now, do you?

A. Yes, sir.

The COURT: Now, you can proceed at once, Mr. Henry.

Officer sworn and jury retire.

Recess until 2 o'clock p. m.

Resumed session.

In pursuance of such directions the jury viewed the premises.

The COURT: Are you gentlemen ready to present to the court your arguments in regard to the instructions?

Mr. HARKNESS: I think we are, your honor.

Argument of counsel on the requests presented to the court, begun by Mr. Harkness, who was interrupted, and the following occurred:

Mr. HENDERSON: Judge, I would like to make inquiry just here before you start on that branch of it. I would like to inquire if you claim that you are the owners of the land.

Mr. HARKNESS: Yes; subject to this possessory right; that is just what we do claim.

Mr. HENDERSON: Well, do you claim that you are the owners of the land, and we—what is it that you admit we have?

Mr. HARKNESS: Nothing; not a thing.

825 Mr. HENDERSON: Nothing?

Mr. HARKNESS: Not a thing.

Mr. HENDERSON: The claim is that you own it all absolutely?

Mr. HARKNESS: Except the possessory right which Ferguson had.

Mr. HENDERSON: Now, what is your claim in relation to it?

Mr. HARKNESS: Well, I will try and explain my claim.

Mr. HENDERSON: Well, I wanted a statement; if you don't want to make it all right.

Argument on instructions continued by Mr. Harkness, followed by Judge Henderson.

Mr. HENDERSON: I will make them an offer in this case, and they can take my statement now for it; that we will consent in this case that they may have condemnation of a line of road that will leave us a 25-foot dam. I will then reform these pleadings. I will put that in shape so that they can have the right, and they may condemn and take and have by the solemn judgment of this court, a route here, that will leave us a 25-foot dam there.

Argument of Mr. Henderson heard in part; whereupon a recess was taken until 2 o'clock p. m. On resuming session, the argument was continued, and concluded; and an adjournment taken until Wednesday, April 27th, at 10 o'clock a. m.

WEDNESDAY *April* 27th.

Resumed session.

The COURT: Are there any other matters which you gentlemen would like to present?

Mr. HARKNESS: There was left undecided, which I think should be determined, about the admissibility of the judgment that was offered here for general purposes.

Mr. HENDERSON: I understood that that was ruled on.

The COURT: Well, there were certain matters named which
826 the court acted upon, and they were admitted on those; just what they were, I don't.——

Mr. HARKNESS: Well, your honor will recollect the judgment-roll in the old case which we offered, and your honor took it under advisement?

The COURT: Yes, sir.

Mr. HARKNESS: I will say now that we don't care anything about it, but will take a ruling of the court on it.

The COURT: Well, for certain matters named, and I don't remember what they were now, it was admitted, but when it was first offered it was for any and all purposes, I don't remember just what the words were, and the court ruled that it could be admitted on that ground, but there were certain purposes named for which the court allowed it to be admitted.

Mr. HARKNESS: Mr. Reporter, we understand the ruling now is that the judgment is not admissible generally for all purposes.

The COURT: Yes. And the said defendants requested the court to charge the jury as stated and set out in the written requests of defendants *in* file herein and presents the same to the court. Each and all of which were refused by the court, to which the defendants then and there excepted and said written requests of defendants are hereby referred to and made a part of this bill of exceptions.

Instructions of the Court to Jury.

In this class of cases, gentlemen, the law requires that the court should instruct, give you the charge of the court prior to argument.

Mr. HENDERSON: If the court please, I would—I have supposed that the court was going to announce the decision before the charge upon the questions that have been submitted.

The COURT: Which have you reference to, Judge?

Mr. HENDERSON: Well, I have reference to the general question as to the questions that were to be submitted to the jury; but still if it is to be before the argument I don't know that it is any
827 different.

The COURT: No: the court understood that it would be included in the requests, or in the action of the court on the requests that would be given to the jury.

Mr. HENDERSON: Well, if that is so, I would like to before commencing the charge to say that in case, of course I don't know what view the court takes of the matter, I want to ask the court in case the court should conclude or determine to decide that certain questions are the questions—the main questions of fact here for the court and not for the jury, as a matter of law, then I desire to ask now that the court in the exercise of its equity powers shall take the verdict of the jury upon those questions.

The COURT: Yes.

Mr. HENDERSON: As a matter of equity?

The COURT: I see.

GENTLEMEN OF THE JURY: By this proceeding the plaintiff claims it has the right to an easement or a right of way for a railroad in and over a strip of land described in the complaint, being 200 feet wide, being one hundred feet wide on each side of the center line of survey about 4,550 feet long, and containing about 22 and $\frac{9}{10}$ acres, upon paying the value of the possessory right, meaning the damages to the occupant if there be any occupant entitled thereto.

In this case it is for the court to determine the conditions precedent to condemnation, whether the plaintiff has shown a right thereto and all conflicting or adverse claims to the property, but the compensation and the damages arising out of the taking—this will be done by findings hereafter. You are to assess the compensation and the damages if any, to be paid.

You are instructed that the plaintiff has shown a right to acquire by condemnation the possessory right to the strip of land in question, and it is left to you to ascertain and assess the compen-
828 sation and the damages by the taking and which would be just and accrue to one who was an actual occupant and entitled thereto; and the question as to which of the defendants is entitled to such compensation or damages will be otherwise determined.

As a guide on the question of compensation and damages you are

instructed that it is admitted that the tract of land of which the strip in question is a part was and is unsurveyed public land of the United States; that the occupant of such land acquires no title or estate in the land by such occupation or possession. The right which he acquires is that if he maintains his possession until after the lands are surveyed and subject to entry, he has for a limited time a preference to enter the same at the Land Office and by compliance with the laws acquires a title thereto. The compensation which you will give should therefore be with reference to the value of such a possessory right, and such a possessory right as existed on the 14th day of September, 1896, and prior to the death of W. W. Ferguson. You will therefore ascertain and assess, first, the fair market value of the possessory right to the strip of land in question and sought to be condemned and all improvements thereon pertaining to the realty on the 14th day of September, 1896. Second: the damages which will accrue to the possessory right to the other portions of the tract of land possessed with the strip sought to be condemned by reason of the evidence of the severance of the latter from the remaining portion, and the construction of a railroad as proposed by the plaintiff. Third; the cost of good and sufficient fences along the line of said proposed railroad and between it and other adjoining lands as occupied on the 14th day of September, 1896, and the cost of cattle-guards where the fences may cross the line of said proposed railroad. Fourth; the benefits, if any, to the possessory right to that portion of the tract of land not sought to be condemned but possessed with the strip sought to condemned,
829 by the construction of said proposed railroad.

In assessing values you are to consider the condition of the land and improvements to the realty that existed on the 14th day of September, 1896, and with reference to their market value to the use to which they could be put as lands in their condition.

And you are instructed that neither of the defendants L. L. Nunn or The Power Transmission Company has shown a right to flow the same, or to their use as a reservoir site, or to any increased value by reason of any right to flow or use the same for a reservoir site. I suppose it is meant there for the expense, or rather for the damages, is it not?

Mr. HENDERSON: I don't know.

The COURT: But you are further instructed that under the issues submitted to you for your conclusion in this case you cannot in estimating the market value of the premises or the damages to the possessory right of the defendants thereto, estimate such value with reference to any right to the defendants or either of them to flow the same with water to any considerable depth.

Now, gentlemen of the jury, you are to determine the issue submitted to you from the testimony which has been given you in the court. You are the judges of the facts and of the credibility of the witnesses and the weight of the evidence. Six of your number may agree upon a verdict, that is to say, six of your number may find a verdict and assess the damages.

When you have retired to your room you will select one of your

number as a foreman and when you have agreed upon a verdict your foreman will sign it and return it to the court. In case only six of your number should be able to agree as to the verdict, and your foreman is not one of those six, then all of the six jurors agreeing upon the verdict must sign it. You will determine the amount of the damages from the preponderance of the evidence. By
830 a preponderance of the evidence is meant the greater weight of the evidence. A form for your verdict will be handed you by the clerk when it is finally submitted to you.

You may proceed gentlemen.

Mr. HENDERSON: Well, if the court please, I desire to take exceptions to the charge.

The COURT: Yes, and they will be numbered, and your requests will be numbered and signed by the court.

Mr. HENDERSON: Our requests were numbered, I think, and not one of our requests were granted, as I understand, and it will be easy. Now, I desire to except to the court's ruling, to take the principal and only facts in this case from the jury. I except to the charge of the court — from the jury the right to determine the question as to who and which of these parties are first in that right.

I except to the ruling of the court in taking from the jury the right to determine the necessity of the parties respecting it, to the canyon and their enterprise.

I except to the court's ruling taking from the jury the right to determine the question as to whether the plaintiff in this case has shown any necessity for taking a dam—or taking a road or a right of way for a railroad at the grade at which the evidence shows the one in this case to have been surveyed.

I except to the ruling of the court in taking from the jury the right to determine the necessity of the plaintiff to condemn this particular piece of land.

I except to the court's submitting to the jury at all or of determining the question in this case, either itself or by the jury, as to the title to this property.

And I except to the ruling of the court in which the court has instructed the jury that there is no evidence in this case upon
831 the question of damages showing any particular value, if it is to be so understood.

We except to the giving of the plaintiff's first request.

We except to the giving of the second request *to* the plaintiff.

We except to the giving of the third request.

We except to the giving of the fourth request.

We except to the giving of the fifth request.

We except to the giving of the sixth request.

We except to the refusal of the court to give our first request.

We except to the refusal of the court to give each and every one of the requests of the defendant- numbered from one to twenty——

The COURT: Twenty-seven, I think.

Mr. HENDERSON: One to 29 inclusive.

Mr. HARKNESS: 27, I think is the last.

Mr. HENDERSON: Well, they are numbered wrong if it so shows.

Mr. HARKNESS: Yes, you had them numbered wrong.

Mr. HENDERSON: We except to the submission to the jury of questions of damage or any other question until what the court determines as preliminary questions are determined by the court and facts are found and conclusions of law thereon.

And at this time I desire to move the court that in view of the instruction that has been given that the court take the verdict of the jury upon the main questions in this case as advisory to the court; in the exercise of its equitable jurisdiction, and that it be considered by the court upon that subject.

I see that the court or somebody has stricken out in the sixth request of the plaintiff as given, the word "damages"—"and damages."

The COURT: "And damages?"

Mr. HENDERSON: Yes, and I desire to except to the giving
832 of the plaintiff's sixth request as modified, if that is a modification.

Mr. HARKNESS: I would like an opportunity of seeing that request. You mean here? That is my handwriting and was put in before presenting them to the court.

Mr. HENDERSON: In the first line, the words "and damages."

The COURT: Well, that was in there.

Mr. HENDERSON: Well, if that was included in there it wasn't modified at all.

Now, if the court please, I desire to demand of the court at this time the right on our part to open and close the argument upon the question of damages.

Mr. HARKNESS: It seems to me that this is a very extraordinary position that they take here. So far as we are concerned, we don't see that there is much argument to be made, still we have our rights here as plaintiffs in the case. We have given the only evidence in regard to the damages that there is; and in regard to taking an advisory verdict, we object to that for the reason that there is no power; the statute absolutely fixes upon the court the duty of determining certain things, and of the jury to determine other things, and it isn't—the verdict of the jury upon what is submitted to them is not advisory.

Mr. HENDERSON: The statement that it is unheard of, if counsel will refer to the authorities he will see that it is almost the universal rule, that upon the question of damages alone that the defendant has the opening and closing, and the fact that we have gone along until we have had a jury here for ten days sitting in this case before we could find out that there was anything for them to determine——

Mr. HARKNESS: We claimed that right before.

Mr. HENDERSON: I know you claimed that right upon cer-
833 tain questions, and simply because we have gone on until this time and the motion could not be made that is no reason why it should not be done at this time. I may say that we have this right, and as to the advisory verdict it is and can be only upon the theory that the questions which your honor has taken from the jury are within its equitable jurisdiction, and under such

circumstances the court always has the right to order a verdict to be taken from the jury, that it might be considered by the court in determining these questions.

Mr. HARKNESS: The court has already determined them without the jury.

Mr. BAILEY: I don't think the court understands so.

Mr. HENDERSON: I understand that these instructions say that it is going to be determined hereafter.

The COURT: That is as to parties.

Mr. HENDERSON: As to parts?

The COURT: Yes.

Mr. HENDERSON: Now which are the parts?

Mr. WEDGWOOD: He said as to parties, Judge, not parts.

The COURT: Parties.

Mr. HARKNESS: This court instructs the jury to return a verdict on certain questions saying that the court would determine other questions, will give its findings formally, or decision.

The COURT: Yes, sir.

Mr. HARKNESS: As to who is entitled to the damages, then when the money is paid into the court, the court as I understood it will give the Ferguson heirs if they *co*llm the damages.——

The COURT: Whoever may under the law, whoever has the right.

Mr. HARKNESS: Whoever has the right.

Mr. HENDERSON: Well then, if the court please, if that is your honor's construction of the charge——

The COURT: Yes, sir.

834 *The Court: Yes, sir.*

Mr. HENDERSON: I want again to say that we want the findings of fact before we submit to the jury the questions of damages, and we ask the right upon the close of this argument. The authorities all give that right, if that is the only thing that is submitted.

The COURT: The motion is overruled.

Mr. HENDERSON: Give us an exception.

Arguments of counsel begun by Mr. Harkness, followed by Mr. Henderson, and concluded by Mr. Wedgwood.

The COURT: Gentlemen, the forms of the verdict have been prepared here; will you hand them to the jury Mr. Clerk. You will retire to your jury-room.

Mr. HARKNESS: I would like to know whether the jury want any of the figures from the reporter's notes?

The COURT: Well, they can ask for them.

Juror COLVIN: I would just like to ask one question. Is it possible that the jury has no right to decide what the law is; is that the fact that we have no right to say?

The COURT: Yes, under the law, you will take the instructions that the court has given you.

Mr. COLVIN: That is the law?

The COURT: Yes, sir.

Mr. HENDERSON: Well, will the instructions be sent with the jury?

The COURT: Yes, sir. I think the law contemplates that.

Mr. HENDERSON: Well, I don't understand by that that your honor intends to modify the instructions that you gave that they are the judges of the fact?

The COURT: No. (Officer sworn.) Retire gentlemen with the officer.

Mr. HENDERSON: If the court please, there is one matter I
835 want to have upon the record of the court exceptions to the refusal of the court to give us a trial before the jury upon each and all of the questions.

The COURT: I think you took that.

Mr. HENDERSON: I think I took one; also except to the refusal of the court to take a verdict of the jury upon the motion I made after the court had determined that the questions were questions of law for the court.

The COURT: Yes, let the record show such.

Mr. HENDERSON: Now, I want to know that there will be no objection to our specific exceptions to the refusal to give our requests I have numbered them; I haven't gone through——

The COURT: Each and every one? The court has renumbered those Judge Henderson. You had them not numbered in their order and the court has assumed to change the numbering that you had on them.

Mr. HENDERSON: Well, what I want to know is this. I want to know that there isn't any objection to my not going through and specifying——

The COURT: Let the record show that you took exceptions to each and every one of your requests.

Mr. HENDERSON: And that in settling the bill of exceptions I shall have the right to put in that each one is refused.

The COURT: Yes; well, there was a part of one, there was one instruction given, as the court remembers.

Mr. HENDERSON: I would like to know which one it was.

The COURT: No, it was modified, it was not given in full.

Mr. HENDERSON: Well, which one was it?

The COURT: It was a modification to the 29th.

Mr. HENDERSON: Let me see it, if you please. Well then that ought to go to the jury then if it is modified.

The COURT: It has been given in the form that the court gave
that is a copy of it, that is as to the market value, as I re-
836 member.

Mr. HENDERSON: I see one that you haven't marked here, if the court please. That is the last one, 29.

The COURT: Well, that is a part of the 29th. I will mark it though that was partially given. I will mark it.

Mr. HENDERSON: I don't remember that there was anything included in that.

The COURT: Well, there was something on that; that is my recollection; there was something in regard to that.

Mr. HENDERSON: Well now, Judge, if you wrote up anything in regard to that, I think you failed to read it, for I didn't notice anything of the kind.

The COURT: Well, let it go then as refused.

Mr. HENDERSON: Well, we except also to any modifications of any of the requests on our part, if any were——

Mr. HARKNESS: The jury having requested the testimony as to cost of fencing, etc. to be read by the stenographer; by consent of counsel for the defendants, the jury were allowed to take the written statement of J. L. Thompson, superintendent of buildings and bridges, as to the estimate cost of fencing and cattle-guards, instead of having the statement read to them from the reporter's notes.

Jury, after being out five and a half hours returned into court and in due form of law present their verdict.

Mr. HARKNESS: I think that before recording the verdict the estimate of $304.60 per mile, I think should be corrected to a gross estimate. It is quite likely that the jury did not have the length, it was 9,100 feet.

The COURT: Well, wouldn't the verdict estimate that, as to that rate?

837 Mr. HARKNESS: Yes, but would it be a complete verdict "per mile"? It was 9,100 feet. I can figure it out in a half a minute if the court will give me a little time.

Argued to the court.

Mr. HARKNESS: We ask to have that referred back to the jury to fix the gross amount for the cost of fences.

Argued to the court at length.

The COURT: You gentlemen will retire and find that matter.

Mr. HARKNESS: If the jury remember the evidence.

The COURT: If you do remember the evidence.

Mr. BAILEY: I think the jury would like to have the length of the line.

A JUROR: We don't remember the length of the line.

Mr. HARKNESS: If the jury don't remember that, the reporter's notes must be referred to on that matter.

The COURT: Yes.

Mr. BAILEY: Well, doesn't the instructions fix that?

Mr. WEDGWOOD: Yes, it is in the instructions 4,550 feet on each side, making 9,100 feet for both.

The COURT: Well now, can't the jury from their estimate go out and fix that?

Mr. HARKNESS: They can if they are satisfied that it is 9,100 feet.

Mr. BAILEY: Well, can't they take the instructions of the court for that?

The COURT: I think so. You may retire and consider the matter.

(Jury retire and subsequently return into the court and deliver their correct verdict.)

838 And afterwards the court made its findings of fact and conclusions of law and entered the decree now of record and on file herein. And at the time and before the said findings of fact were made and filed, defendants, The Telluride Power Transmis-

sion Company and L. L. Nunn, by its attorneys presented the court in writing the following requests to find.

839 STATE OF UTAH:

In the District Court of the Fourth Judicial District, County of Utah.

RIO GRANDE WESTERN RAILWAY CO., Plaintiff,
vs.
L. L. NUNN ET AL., Defendants.

Defendants' Requests for Findings.

The defendants again protesting against this court's finding the facts herein, and not waiving their objection to the court's assuming to find the facts and refusing to submit the question of fact to the jury, hereby request the court to make the following findings of fact, in case the facts are found by the court:

1. That in the year 1895 L. L. Nunn, who was and is a citizen of the United States, located a reservoir and dam site in the Provo canyon at or near a point known as Hanging rock on the Provo river, and located and surveyed a flume or ditch line therefrom at a height of 60 ft. above the water level at said point, and staked and marked the same plainly upon the ground, and claimed the right to convey the waters of said river along said line to a point near the mouth of said canyon and to utilize the same for the purpose of generating power and other beneficial uses; and at the same time located and plainly marked upon the ground a site for a small or temporary dam and flume some distance below Hanging rock with which to aid in the construction of the upper or large dam and waterway, and that in the fall of 1895 he commenced the execution of said work with a large force of men.

2. That prior to the commencement of this suit he had expended on said work about $50,000, and $150,00 since then, and that said work has been prosecuted with diligence at all times.

3. That it was the intention of said Nunn to construct a plant capable of generating 10,000-horse power by means of said large dam and flume, and that it is possible to do so; that the cost of constructing same would be greatly lessened and the time of
840 its completion has-ened by the use of power generated by said smaller or temporary plant.

4. That the proposed appropriation of the waters of said river is reasonable to the extent of 10,000-horse power, and that the work done by said Nunn is reasonably calculated to effect said appropriation.

5. That the land which would be covered by the proposed reservoir as located and surveyed by said Nunn, except 160 acres in which the strip of land in controversy is included, was unoccupied and unsurveyed land of the United States.

6. That long prior to 1895 one W. W. Ferguson, who is named as a defendant, settled upon the said 160 acres, situated above Hang-

ing rock on the Provo river, and was residing and living thereon during 1895.

7. That defendant Nunn, in pursuance of a verbal agreement made in the fall of 1895, entered into a written contract with said Ferguson on April 24th, 1896, for the purchase of said 160 acres, who afterwards in pursuance of said contract conveyed said land to defendant Nunn by good and sufficient deed.

8. That on March 24th, 1896, and for some time prior *to* thereto defendant Nunn had said dam and reservoir sites, and the line of said flumes, plainly marked upon the ground, and his employees were in possession thereof prosecuting said work.

9. That plaintiff through it- general manager had actual notice in the fall of 1895 that defendant was engaged in the construction of a power plant in said Provo canyon, and was intending to erect a dam, which plaintiff admits was to be of a height not to exceed 25 feet.

10. That on March 24, 1896, plaintiff with a force of one surveyor and three other employees began a survey of an alleged line of railroad up said canyon and along said river. That about April 10, 1896, said surveyor reached a point near Hanging rock with an angle line; that he found employees of defendant Nunn there engaged in preparations for the building of said dam, and
841 was informed by them that the water would be taken out near that point by means of a dam on a level 60 ft. above the river; that on or about May 13, 1896, said surveyor had reached said point with a final location line on the north side of said river, and was then informed by employees of defendant Nunn that the proposed dam would be 85 ft. high, and the site thereof was plainly marked upon the ground.

11. That a map of said surveyed line of railroad was filed in the local land office in June, 1896, and adopted on June 9th, 1896, by resolution of the board of directors of plaintiff. That said line as surveyed and adopted is on the north side of the river across said 160 acres.

12. That about July 1, 1896, a large portion of plaintiff's line was changed from the north side to the south side of the river, a distance of 200 ft. or more, and that a plat of said line as changed was filed in the land office in December, 1896, after the commencement of this suit and that said survey extends through the strip of land in controversy. That no part of the land in controversy is included within the strip of land 200 ft. wide along the line adopted by resolution June 9th, 1896.

13. That the line as surveyed through the premises in controversy had not been adopted by the plaintiff at the time of the commencement of this suit.

14. That the center line of railroad as surveyed by plaintiff runs along the bottom of said canyon, and at the places where defendant has erected his temporary plant and along the land in controversy it would be when graded only about 14 ft. above the surface of the river.

15. That a part of the premises in controversy is flooded by the

present temporary dam of defendant, which is 10 feet high; that a dam 25 ft. high at or near Hanging rock would flood the proposed grade of the entire center line through the premises in controversy to a depth of from 10 to 12 ft. and the greater portion of said premises.

842 16. That the average grade of said line of railroad through said canyon is less than 1 %, and the maximum grade established by plaintiff is 2 %. That for a considerable distance above Hanging rock, which is about 1,200 feet below the Ferguson land, the grade is about one-tenth of 1 %, and for more than a mile below said point it averages less than 1 %.

17. That a line could be surveyed and a road built for very little if any additional expense, so as to overcome with a grade less than 2 % a dam 25 feet high at Hanging rock.

18. That on the trial of this cause defendants offered in open court to give to plaintiff a right of way through the entire reservoir site, including a right of way over said 160 acres, for a line of road which would permit the erection of a dam 25 ft. high at Hanging rock.

19. That a storage reservoir is essential to the enterprise of defendants to an extent of at least 25 ft., for the purpose of protection from ice and of regulating and equalizing the flow of water.

20. That there is no necessity for condemning a right of way for a railroad on the line as surveyed over the premises in controversy.

21. That there is no necessity for condemning a right of way for a railroad on a line which would not permit the erection and maintenance of a 25-ft. dam at Hanging rock.

22. A railroad can be built along the hillside above the bed of the stream through said canyon; a reservoir must occupy the bed of the stream.

23. The necessity of defendants' use of the premises in controversy for their purposes is greater than the necessity of plaintiff for its purposes. Both are quasi-public uses, and other things being equal, they stand upon equal footing.

24. The occupation of the premises in controversy by defendant Nunn for a public use was prior to the survey of plaintiff's
843 line over the same.

25. The value of the premises in controversy, involving the privilege to flood them with a dam 25 feet high at Hanging rock, is $100,000, and vastly more if the privilege of flooding them with an 85-foot dam is involved.

26. The storage and appropriation of the waters of said river by means of a dam 25 feet high at or near Hanging rock is a reasonable appropriation.

BROWN & HENDERSON,
Att'ys for Def'ts.

844 And the court then and there refused to find each and every one of the said requests and the said defendants then and there excepted to the refusal to find each and every one of the said requests.

Said requests were presented in due time and were in writing and were each and all refused against the exceptions of the said defendants.

845 In the District Court of the Fourth Judicial District, State of Utah, County of Utah.

THE RIO GRANDE WESTERN RAILWAY Company, Plaintiff,
vs.
W. W. FERGUSON, THE TELLURIDE POWER Transmission Company, L. L. Nunn, and L. Holbrook, Defendants.
} Assignments of Error.

Now comes the above-named defendants The Telluride Power Transmission Company and L. L. Nunn by Brown and Henderson their attorneys and in regard to proceedings in the trial of said cause assigns the following errors, to wit:

1. The court erred in overruling and denying challenge of defendants to the pannel of jurors.

2. The court erred in permitting the jury to be sworn as a jury in said cause over the objection of the defendants for the reason that they were not summoned according to law.

3. The court erred in instructing the jury as requested by plaintiff's first request to charge the jury.

4. The court erred in instructing the jury as requested by plaintiff's second request to charge the jury.

5. The court erred in charging the jury as requested by plaintiff's third request to charge the jury.

6. The court erred in charging the jury as requested by plaintiff's fourth request to charge the jury.

7. The court erred in charging the jury as requested by plaintiff's fifth request to charge the jury.

8. The court erred in charging the jury as requested by plaintiff's sixth request to charge the jury.

846 9. The court erred in refusing to charge the jury as requested by defendants' first request.

10. The court erred in refusing to charge the jury as requested by defendants' second request.

11. The court erred in refusing to charge the jury as requested by defendants' third request.

12. The court erred in refusing to charge the jury as requested by defendants' fourth request.

13. The court erred in refusing to charge the jury as requested by defendants' fifth request.

14. The court erred in refusing to charge the jury as requested by defendants' sixth request.

15. The court erred in refusing to charge the jury as requested by defendants' seventh request.

16. The court erred in refusing to charge the jury as requested by defendants' eighth request.

17. The court erred in refusing to charge the jury as requested by defendants' ninth request.

18. The court erred in refusing to charge the jury as requested by defendants' tenth request.

19. The court erred in refusing to charge the jury as requested by defendants' eleventh request.

20. The court erred in refusing to charge the jury as requested by defendants' twelfth request.

21. The court erred in refusing to charge the jury as requested by defendants' thirteenth request.

22. The court erred in refusing to charge the jury as requested by defendants' fourteenth request.

23. The court erred in refusing to charge the jury as requested by defendants' fifteenth request.

24. The court erred in refusing to charge the jury as requested by defendants' sixteenth request.

25. The court erred in refusing to charge the jury as requested by defendants' seventeenth request.

847 26. The court erred in refusing to charge the jury as requested by defendants' eighteenth request.

27. The court erred in refusing to charge the jury as requested by defendants' nineteenth request.

28. The court erred in refusing to charge the jury as requested by defendants' twentieth request.

29. The court erred in refusing to charge the jury as requested by defendants' twenty-first request.

30. The court erred in refusing to charge the jury as requested by defendants' twenty-second request.

31. The court erred in refusing to charge the jury as requested by defendants' twenty-third request.

32. The court erred in refusing to charge the jury as requested by defendants' twenty-fourth request.

33. The court erred in refusing to charge the jury as requested by defendant's twenty-fifth request.

34. The court erred in refusing to charge the jury as requested by defendants' twenty-sixth request.

35. The court erred in refusing to charge the jury as requested by defendants' twenty-seventh request.

36. The court erred in refusing to charge the jury as requested by defendants' twenty-eighth request.

37. The court erred in refusing to charge the jury as requested by defendants' twenty-ninth request.

38. The court erred in charging and instructing the jury that they had no right to determine the necessity of condemning the *the* premises in controversy.

39. The court erred in not submitting to the jury the question as to the necessity of the plaintiff in condemning the land in controversy.

40. The court erred in charging the jury that they could only consider in assessing the damages any possessory right in W. W. Ferguson as it existed on the 14th day of September, 1896.

41. The court erred in charging the jury that the plaintiff
848 had shown a right to acquire by condemnation the possessory right to the strip of land in question.

42. The court erred in instructing the jury that neither the defendant or The Power Transmission Co. had shown the right to flow the land in controversy or to either use it as a reservoir site or to increase the value of it by reason of any right to flow or use the same as a reservoir site.

43. The court erred in charging the jury as follows:—"You are further instructed that under the issues submitted to you for your conclusions in this case you cannot in estimating the market value of the premises or the damage to the possessory right of the defendants thereto estimate such value with reference to any right of the defendants or either of them to flow the same with water to any considerable depth."

45. The court erred in charging the jury that it was for the court to determine the condition precedent to condemnation and whether the plaintiff had shown a right thereto over all conflicting or adverse claims to the property.

46. The court erred in not charging the jury as requested by the defendants that they had the right to determine the necessity for the condemnation, and extent thereof, by the plaintiff.

47. The court erred in not charging the jury as requested by the defendants that in estimating the damages the jury could take into consideration the right of the defendants as they existed at the time that the plaintiff commenced their work in surveying for a railroad.

48. The court erred in its first finding of fact for the reason that it is not supported by the evidence.

49. The court erred in refusing to find as a fact the defendants' first request.

50. The court erred in not finding as a fact as requested by defendants' second request.

51. The court erred in not finding as a fact as requested by defendants' third request.

849 52. The court erred in not finding as requested by defendants' fourth request.

53. The court erred in not finding as a fact as requested by defendants' fifth request.

54. The court erred in not finding as a fact as requested by defendants' sixth request.

55. The court erred in not finding as a fact as requested by defendants' seventh request.

56. The court erred in not finding as a fact as requested by defendants' eighth request.

57. The court erred in not finding as a fact as requested by defendants' ninth request.

58. The court erred in not finding as a fact as requested by defendants' tenth request.

59. The court erred in not finding as a fact as requested by defendants' eleventh request.

60. The court erred in not finding as requested by defendants' twelfth request.

61. The court erred in not finding as requested by defendants' thirteenth request.

62. The court erred in not finding as requested by defendants' fifteenth request.

63. The court erred in not finding as requested by defendants' sixteenth request.

64. The court erred in not finding as requested by defendants' seventeenth request.

65. The court erred in not finding as requested by defendants' eighteenth request.

66. The court erred in not finding as requested by defendants' nin-teenth request.

67. The court erred in not finding as requested by defendants' twentieth request.

68. The court erred in not finding as requested by defendants' twenty-first request.

69. The court erred in not finding as requested by defendants' twenty-first request.

850 70. The court erred in not finding as requested by defendants' twenty-second request.

71. The court erred in not finding as requested by defendants' twenty-third request.

72. The court erred in not finding as requested by defendants' twenty-fourth request.

73. The court erred in not finding as requested by defendants' twenty-fifth request.

74. The court erred in not finding as requested by defendants' twenty-sixth request.

75. The court erred in not finding the facts as requested by the defendants for the reason that the testimony in said cause, by overwhelming preponderance of the evidence, established the facts as requested by the defendants.

76. The court erred in not finding as a fact as follows:—"That neither on or before or since the 8th day of July, 1896, has the defendants, The Telluride Power Transmission Company or L. L. Nunn, or either of them, had any possession of the land sought to be condemned or by appropriation or otherwise any right to raise the waters of Provo river so as to flow the same or any part thereof, or any right to said lands, or the possession thereof as part of a reservoir site to raise the waters of said river so as to flow the same would be an unreasonable use of the said waters and the public lands and easements in the canyon adjacent to said river," the uncontradicted evidence in said cause showing conclusively that the said defendants, The Telluride Power Transmission Co. and L. L. Nunn, had prior to the date named, and prior to any claim of the said defendants entered upon said lands and established a dam site and were in actual possession thereof, and had acquired the right to raise the waters of the Provo river in said canyon to a height sufficient to generate power for their electrical plant, and that such use of the

water of the said stream would be and is a reasonable use, and there was not necessity for the plaintiff to condemn any lands that would interfere with such use.

851 77. The court erred in not finding upon all the material issues in said cause.

78. The court erred in rendering judgment for the plaintiff upon the facts found.

79. That the findings of facts filed in said cause are not supported by the evidence, but are contrary thereto.

80. That the judgment and decision of the court awarding judgment in favor of the plaintiff is not supported by the evidence.

81. The court erred in denying defendants' petition to remove said cause to the Federal court.

82. The court erred in assuming to retain jurisdiction over said cause and proceeding to try the same after the filing of the petition on the part of the defendants to remove said cause to the circuit court of the United States for the district of Utah.

83. The court erred in holding and deciding that it had jurisdiction to hear, try and determine said cause.

BROWN AND HENDERSON,
Att'ys for Def'ts.

852 In the District Court of the Fourth Judicial District in and for the County of Utah and State of Utah.

RIO GRANDE WESTERN RAILWAY CO., Plaintiffs, *vs.* W. W. FERGUSON, THE TELLURIDE POWER Transmission Co., L. L. Nunn, and L. Holbrook, Defendants.	Petition for Removal of This Cause to the United States Circuit Court in and for the District of Utah.

To the honorable district court of said county and State:

Your petitioners, The Telluride Power Transmission Co., and L. L. Nunn, respectfully show that they are the defendants in the above-entitled suit, and that the matter and amount in dispute in the said suit exceeds, exclusive of interest and costs, the sum and value of $2,000.00.

Your petitioners further show that said suit is of a civil nature and that in said suit there is a controversy that is wholly between citizens of different States and which may be determined as between them, to wit:

A controversy between your petitioners, The Telluride Power Transmission Co. and L. L. Nunn, who aver that they were, at the time of the bringing in of this suit, and still are, residents and citizens of the State of Colorado, and the said plaintiff, The Rio Grande Western Railway Co., who as your petitioners aver was then,

853 and still is, a resident and citizen of the State of Utah: that said controversy is of the following nature, viz: An action purporting to be an exercise of the right of eminent domain and to condemn a right of way over certain lands described in plaintiff's

complaint, and to determine the extent of the occupation of your petitioners, and to decree a right of way over the land so occupied for and in the behalf of the plaintiff.

Your petitioners allege that the said defendant Holbrook has no interest whatever in said controversy and claims no interest in and to said lands and that his presence is not necessary to determine the controversy involved in said suit.

Your petitioners further allege that the defendant, W. W. Ferguson, has contracted to sell and convey the lands described in plaintiff's complaint, and a portion of which plaintiff seeks to obtain a right of way to deprive your petitioners, and said contract is still in force and binding and operative upon the parties thereto, and that by the terms of said contract all of said Ferguson's title, interest, and right in and to said lands passes and is transferred to your petitioners.

And your petitioners further aver that the said plaintiff and your petitioners are all actively interested in said controversy.

Your petitioners further aver that said controversy is one that is separable, and your petitioners herewith offer a bond with good and sufficient surety for their entering in said circuit court of the United States, on the first day of the next session, a copy of the record in this suit, and to pay all of the costs that may be awarded by
854 said circuit court of the United States if the said court shall hold that this suit was wrongfully or improperly removed thereto, and they pray this honorable court to proceed no further herein except to make the order of approval required by law and to accept the said surety and bond and to cause the record to be removed into the said circuit court of the United States in and for the district of Utah, and they will ever pray.

BROWN, HENDERSON & KING,
Attorneys for Petitioners.

STATE OF UTAH, }
County of Utah, } ss:

William H. King, being sworn upon oath, deposes and says that he is a member of the firm of Brown, Henderson and King, attorneys for the petitioners in the above-entitled cause; that he has read the foregoing petition and knows the contents thereof, and that the statements as alleged contained therein are true as he verily believes.

WILLIAM H. KING.

Subscribed and sworn to — me this 5th, day of December, 1896.

ED. S. FERRY,
Notary Public.

855 Know all men by these presents: that we, as sureties, are held and firmly bound unto the Rio Grande Western Railway Co. in the penal sum of $500 for the payment whereof well and truly to be made unto the said Rio Grande Western Railway Co., its successors and assigns, we bind ourselves, our heirs, representatives, and assigns, jointly and severally, firmly by these presents:

Yet upon these conditions The Telluride Power Transmission Co. and L. L. Nunn having petitioned the fourth district court of Utah county, for the removal of a certain cause therein pending wherein The Rio Grande Western Railway Co. is plaintiff, and W. W. Ferguson, The Telluride Power Transmission Company, L. L. Nunn, and L. Holbrook, defendants, to the circuit court of the United States in and for the district of Utah:

Now if the said Rio Grande Western Railway Co. and the said The Telluride Power Transmission Co., and L. L. Nunn, your petitioners, shall enter into the said circuit court of the United States on the first day of the next session with a copy of the record in said suit, and shall well and truly pay all costs that may be awarded by said circuit court of the United States if said court shall hold that the said suit was wrongfully or improperly removed thereto, then this obligation to be void, otherwise in force and virtue.

Witness our hands and seals this — day of ——, 1896.

[SEAL.] —— ——.
[SEAL.] —— ——.
[SEAL.] —— ——.

Duly signed by sureties and verified.

856 STATE OF UTAH, } ss:
County of Utah, }

—— —— and —— —— of said county, the sureties named in the foregoing bond, being duly sworn, each for himself, deposes and says: That he is a resident of the State of Utah, and a property-holder therein: that he is worth the sum of $500.00 over and above all just debts and liabilities, exclusive of the property — from execution, and that he has property in the State of Utah of the value of more than $500.00.

[SEAL.] —— ——.
[SEAL.] —— ——.
[SEAL.] —— ——.

Subscribed in my presence by said —— —— and —— —— and by them sworn to before me this —— day of Dec. 1896.

—— ——,
Notary Public.

Marked on back: Rio Grande W. R'y Co. *vs.* W. W. Ferguson, *et al.*, petition for removal of cause to circuit court of U. S. Defendants' Ex. 1.—D. H. R.

857 DEF'TS' EX. 5, D. H. R.

This agreement, made and entered into at Provo, Utah this 25th day of March, 1896, by and between Guy Sterling as the first party and L. L. Nunn as the second party:

Witnesseth: That the first party agrees:

1st. To provide and construct on a foundation provided by second

party, and turn over to second party clear of debt within sixty days after the completion of said foundation, four thousand feet of flume ready for use complete with chairs all in accordance with the plans and specifications marked Exhibit- One, Two, Three, and Four, and signed by the parties hereto, attached hereto and made a part hereof, so far as the same are applicable.

2nd. That the staves of said flume shall be of the best quality of Oregon fir and the bands shall be of mill steel or Norway iron.

3rd. That the said flume, including the chairs shall be constructed in the best and most substantial manner and of first-*call* and appropriate material throughout.

4th. That the carrying capacity of said flume shall not be less than twelve thousand cubic feet per minute of a slope of one foot in one thousand feet as indicated by the plans and specifications hereto attached, which are modified only as to the carrying capacity.

5th. That the said structure is and shall be substantial and permanent in design and construction, it being expressly understood that the second party is in nowise responsible therefor, not knowing as to the practical utility and durability of the same and adopting it entirely on the guarantee of the said first party herein contained.

6th. That time is of the essence of this contract and that the first party shall pay to the second party as liquidated damages twenty-five dollars per day for delays occasioned by him beyond the time above mentioned.

In consideration of the above covenants duly entered into by said first party, said second party agrees as follows:

1st. To prepare a foundation for said structure, which shall not require a curve sharper than one hundred and fifty feet radius.

858 2nd. To accept either of the chairs designated on Exhibit One or Four as elected by first party, it being understood that in either case first party shall use bolts as indicated by Exhibit Four and that he shall add two inches to the chair base as shown.

3rd. To pay said first party for said structure at the rate of two dollars ($2.00) per linear foot, viz: Eight thousand dollars, ($8,000.00) for said four thousand feet, as follows: Eighty-five per cent. of the amount constructed each month on the tenth day of the following month and the remaining fifteen per cent. thirty days after the work has been completed, and tested, for service, said test to take place within thirty days, after completion.

In witness whereof, said parties have hereunto signed their names the day and year first above written.

GUY STERLING. [SEAL.]
L. L. NUNN. [SEAL.]

859 DEF'TS' EX. 7. D. H. R.

Warranty Deed.

William W. Ferguson, unmarried, grantor of the "Toll Gate," Provo canyon, Utah county, Utah, hereby conveys and warrants to L. L. Nunn, grantee, of Telluride, Colorado, for the sum of twenty-five hundred dollars, the following-described tract of land in Provo

canyon, Utah county, State of Utah, one hundred and sixty acres of land, together with all appurtenances thereunto belonging, commonly known as the "Toll Gate," the same being where said grantor resides; said land when surveyed will be so far as can be ascertained part of the W. ½ of the S. W. ¼ of sec. 26, and the N. E. ¼ of the S. W. ¼ and the N. W. ¼ of the S. E. ¼ of sec. 26, township 5 south range 3 east of Salt Lake meridian and the S. E. ¼ of the S. E. ¼ of sec. 27 in said township.

Witness the hand of the said grantor this 26th day of December A. D. 1896.

WILLIAM W. FERGUSON.

Signed in the presence of
SAMUEL A. KING.

Marked on back.

STATE OF UTAH, }
County of Utah, } *ss:*

On this 26th day of Dec. 1896, personally appeared before me William W. Ferguson, the signer of the above instrument, who duly acknowledged to me that he executed the same.

JACOB EVANS,
Notary Public.

My commission expires Nov. 16, 1900.
[SEAL.]

No. 476. Warranty deed. William W. Ferguson grantor to L. L. Nunn grantee. Dated Dec. 26, 1896. Recorded at the request of E. Hoyt. February 26, A. D. 1897. At 1 p. m., in Book 38 of Deeds page 129. H. F. Thomas, county recorder, Utah county. Indexed. Pd. $.75 E. Hoyt, Provo.

860 DEFENDANTS' EX. S. D. H. R.

D. C. DODGE testified:

I am general manager of the Rio Grande Western Railway Company; have been since 1889, since the organization; was also general manager of the Denver & Rio Grande Western Railway Company. I am consulted by the company in regard to construction work, where and when it shall be done; the president gives directions in regard to construction through me.

Q. Since the organization of the Rio Grande Western Railway Company, what construction work have you been engaged in?

Mr. BROWN: I object to that as not rebutting anything we have put in evidence and as not material. Had it been material at all it was their direct case.

Objection overruled by the court. Exception taken.

A. The first work was widening the gage of the line from Ogden to Grand Junction.

Mr. BROWN: Now what materiality is that? I object to it and move to strike it out.

Overruled by the court. Defendants except.

Q. How many miles was that?

A. Three hundred and twenty-eight miles, practically rebuilding. It took about two years.

Q. I suppose work of that kind has to be done largely on credit.

Objected to as immaterial. Objection overruled. Exception.

A. It has.

Q. What other lines have you built since that?

Mr. BROWN: Object to that as entirely immaterial and not rebuttel.

Objection overruled. Exception.

A. We have built lines to the Tintic mining district, and from Tintic nearly to Marysvale, and the line to Tintic was about fifty miles, the Marysvale is 127 to '30 miles. The Tintic we completed the first of January, 1892, the line to Belknap near Marysvale was completed a couple of months ago.

861 Q. What examination have you made or caused to be made of the Provo canyon?

Mr. BROWN: Object to that as not rebutting; that is just what they went into the first instance.

Objection overruled by the court. Defendants except.

A. We had the canyon examined by our chief engineer.

Mr. BROWN: I move to strike out the answer of witness for another reason, it appears to be entirely hearsay. It appears to be no act within his knowledge.

Objection overruled. Exception.

A. It was always intended by the company to go through that canyon.

Mr. BROWN: I object to his saying what was intended.

COURT: Answer the question.

Mr. HARKNESS: The question was about the examination you had made or directed up the canyon?

Mr. BROWN: I make the same objection to that.

COURT: Same ruling. Exception taken.

A. Our chief engineer was directed to make the examination some time prior to 1890; since that time instructions were given to make an absolute location of line through that line.

Mr. BROWN: Was that instruction in writing?

A. Yes, sir.

Mr. BROWN: I move to strike out the answer, what it was unless the writing is introduced.

Mr. HARKNESS:

Q. I show you a letter dated November 1st, 1895, and directed to E. J. Yard, engineer, did you write that?
A. I did, I signed it. That is my signature.

Mr. BROWN: I object to it as irrelevant and immaterial and not rebutting, and not shown that Dodge was authorized to do it.
The COURT: Let it be admitted. Exception taken.
Mr. HARKNESS: Reading. (Letter given in full below.)

Q. I show you a letter dated March 5th, and ask you if that is your signature, and if you wrote that letter to Mr. Yard?
862 A. Yes, sir, I dictated it and signed it.

Mr. BROWN: Same objection.
Same ruling by court. Exception.
Mr. HARKNESS: Reading. (Letter given below.)

Mr. HARKNESS:

Q. I show you a letter, March 30th, 1896, directed to Mr. Yard, ask you if you dictated that and signed that?
A. I did.

Mr. BROWN: I make the same objection.
Same ruling by the court. Exception. (Letter given below.)

Q. I show you a letter dated May 15th, 1896; ask you if you dictated and signed that and sent it?
A. I did.

Same objection. Same ruling. Exception taken.
Mr. HARKNESS: Read. (Letter given below.)
Mr. HARKNESS: I might state that we have letters here coming clear down nearly to date; I will submit them to the other side; of course I should not want that one should be put in without the explanation of it.
The COURT: If there be no objection, they may be all considered as in evidence.
Mr. BROWN: Subject to the same objection.
Mr. HARKNESS: Yes.
The COURT: Yes.
Mr. BROWN: Well, with that view I would like these fastened together.

Mr. HARKNESS:

Q. Col. Dodge how frequently would you meet the engineer personally?
A. As often as once a month and sometimes twice a month, may have given him oral instructions at these meetings, but nothing varying from the written instructions. In a letter of March I speak of the probability of going to a American fork, at that time the exact survey had not been made; the reason that I had for think-
863 ing that the line might go to American fork was from information Mr. Yard sent me that it would be a shorter line. I

have not got that letter here. Before March 23rd, the matter was definitely settled. We were to start for Provo.

Q. What was the purpose of instructing him to survey and locate a line and put men to work there?

Mr. BROWN: I object to that as not rebutting.

Objection overruled. Exception taken.

A. For the purpose of ascertaining the cost of a line. The purpose was for building a line through the canyon. On the twenty-third day of March, or down until considerably later I did not know that the line would in any way conflict with any right that the defendants here claim. I first learned that they were to have a dam over fifteen feet or twenty-five feet at the outside, I think some time in May or June. It was reported that they had changed their plans; then I discovered that our two projects would conflict about that time; I received notice that they had changed their plans from a fifteen or a twenty foot dam to sixty or eighty-five foot, I don't know which.

I learned that that conflict would exist from our engineer Mr. Yard and from Mr. Nunn; I learned it from Nunn in talking with him I think at Springville, don't remember date exactly, think it was date that letter indicated or soon after, that he would meet General Palmer and Mr. Peabody here. I presume I have the letter of Mr. Yard informing me of it, it is not here. I am informed that the company passed a resolution on the subject of building a road up to Park City last spring, 1896. Have not got the resolution here. The executive committee keep themselves in New York city. That resolution would be on their books in New York city. We always had an intention of building a line through the canyon, it was reported the line was perfectly feasible, had an intention to build through independent of the question of expense; we did not wait for a survey to determine its practicability, did it on the
864 examination made previously, determined that in advance without any survey, any final survey; we determined it before we had any preliminary survey so far as any location was made; this survey did not inform us what the cost of the line was from here to the Park City, through estimates of the engineer, think the engineers have those estimates, I have not; Mr. Yard's estimate, first estimate was made in March, I think, and shown to me February or March. Am not sure which; an estimate was forwarded to me before any survey at all was made; I had an estimate after the survey, the final estimate I think was made on October or November, I am not sure which, 1896, Mr. Yard put in the form of a report to me. I think it was in the fall of 1895 when I first heard that Mr. Nunn contemplated building a dam in this river to make water power; think I heard of it more than once prior to writing my letter of March 5th; I do not know that I did immediately prior. I had heard they were going to build a dam in Provo canyon. I have not got Yard's letter of March 3rd here, I think that was the one that contained the discussion of American fork. Prior

to March 1896, I do not remember that my attention had been called to the provision of the statute limiting the time for building a road to two years.

The foregoing is the whole of the testimony of D. C. Dodge and the letters referred to and made a part of his testimony, are as follows, to wit: the following being a complete copy of the letters and of all of them:

DENVER, COLO., *Nov. 1st*, 1895.

E. J. Yard, resident engineer, Salt Lake City, Utah.

DEAR SIR: Did you ever make an estimate of the cost of line via Provo canyon to Park City? If not, have you in your office, copy of report made by anybody else? If so, please send us copy.

Yours truly, D. C. DODGE.

865 DENVER, COLO., *Feb. 27th*, 1896.

Park City line.

Mr. E. J. Yard.

DEAR SIR: Referring to your letter of December 4th, 1895, in regard to cost of line to Park City; could we not save some five or six miles in distance by not using the U. C. grade between Heber and Park City? What do you estimate it would cost from Heber on a shorter and independent line?

Yours truly, D. C. DODGE.

DENVER, COLO., *March 5th*, 1896.

Park City extension.

Mr. E. J. Yard.

DEAR SIR: Take the best locating engineer you have and put him at work in Provo canyon. We want the best line that can be found in the canyon at a reasonable cost.

Since commencing this letter, I received yours of the 3rd inst. I do not think we can wait until May 1st to commence this work. My idea is to locate through the Provo canyon first; afterwards extend the location to Park City. I agree with you that it may be better to start from American fork instead of Provo, as I think your line down the Provo river will be pretty well up on the bench. If there is too much snow in the canyon at present to do the work satisfactorily, we will wait a week or two but cannot afford to wait as long as May 1st.

How much longer will the line be that we have to build to American fork than to Provo, and how much will it shorten the whole line, Park City to Salt Lake City?

Let me know by telegraph about how soon you think you can commence the location.

Yours truly, D. C. DODGE.

866 DENVER, COLO., *March* 30, 1896.

Park City extension.

Mr. E. J. Yard.

DEAR SIR: All work done in Provo canyon will be paid for by Rio Grande Western Railway Company and charged to account of advance surveys. Keep everything in connection with the survey of that line seperate from everything else.

Yours truly, D. C. DODGE.

DENVER, COLO., *May 9th*, 1896.

Park City extention.

Mr. E. J. Yard.

DEAR SIR: As soon as you complete location of line through Provo canyon, have map prepared for filing in Washington.

Yours truly, D. C. DODGE.

DENVER, COLO., *May 15th*, 1896.

Park City line.

Mr. E. J. Yard.

DEAR SIR: I understand that General Palmer will pass through Utah on the 20th and will return with Mr. Peabody and myself to Utah between the 26th and 28th of this month.

I would like, by the time we arrive there, all the information possible in regard to Park City line, especially the estimated cost through Provo canyon, say from Provo to Heber city. How far has your survey party located?

How are you getting along with the Sevier extension? I suppose you will be able to take us to Richfield by the time we arrive.

Yours truly, D. C. DODGE.

867 *Telegram.*

DENVER, 6, 13.

E. J. Y.:

I have this day written you to commence grading in Provo canyon, prefer to determine whether work by contract. Telegraph me what price you can let contract for, subject to discontinuing on short notice, work to commence immediately.

D. C. DODGE.

DENVER, COLO., *June 13th*, 1896.

Mr. E. J. Yard.

DEAR SIR: Put some men to work in Provo canyon above the point where the wagon-road bridge crosses the Provo river. Have this work done on the line as located, if you are *sta*isfied that it is all right. This work should be done on Government land or land not owned or controlled by Nunn or the Provo Reservoir Co. I am informed that he has an option on the Ferguson ranch. If true, we do not wish to do any work on that land. If he has not secured an option on it, I wish you would secure an option for our right of way

across it at once. Are there any other ranches through which we can secure right of way from the owners or occupants.

If you can arrange with Deal and Mendenhall to do this work at reasonable prices, we would much prefer to have them do it. Of course we cannot guarantee them any definite amount of work or any definite length of time. They must understand that the work is liable to be stopped on few days' notice. Telegraph me what they will do.

Is map of our located line completed and sent off?

Yours truly, D. C. DODGE.

868 DENVER, COLO., *June 15th*, 1896.

Park City extension.

Mr. E. J. Yard.

DEAR SIR: I wrote you Saturday and telegraphed you again this morning, in regard to work in Provo canyon. See Judge Harkness and he will explain to you what he has written General Palmer. As we are liable to be stopped in this work, I hardly think it is wise to let any contract, but secure a good foreman and set forty or fifty men at work, with whatever teams are necessary. If we find they are not interfered with, we can in the near future let a contract to Deal & Co. or somebody else.

If there are any places in the canyon owned by private parties I think we should secure right of way through them. Ask Judge Harkness in regard to this. As the map has gone forward, the sooner this work is commenced the better. Telegraph me how soon you can commence this work.

Yours truly, D. C. DODGE.

Telegram.

DENVER, 16 *June*, '96.

E. J. Yard:

Cip-er message received with the understanding that we can stop work at any time Deal can go to work at prices named in message as quickly as possible following Judge Harkness' instructions as to where work shall be done.

D. C. DODGE.

DENVER, COLO., *June 16th*, 1896.

Park City extension.

Mr. E. J. Yard.

DEAR SIR: Your cipher message in regard to work in Provo canyon is received, and I have replied as follows:

"Cipher message received. With the understanding that we can stop work at any time, Deal can go to work at prices named in
869 message as quickly as possible, following Judge Harkness' instructions as to where work shall be done."

As we cannot tell how long we may be delayed, it is very important that the understanding with Deal be very plain, in regard to discontinuing work at any time we may think advisable. Explain

to Judge Harkness location of dam and our line very fully, and follow his instructions in regard to work.

General Palmer informs me he has approved and returned maps to Mr. Colton to be forwarded through local land office to Washington. I wish you would see maps are not delayed by local land officials.

Yours truly, D. C. DODGE.

DENVER, COLO., *June 20th*, 1896.

E. J. Yard, Esq.

DEAR SIR: It is very important to know we have the best line that can be obtained through Provo canyon especially at upper end where we have commenced work. While it is a good idea to save all the crossings of the river possible I do not think we can afford to sacrifice a good line in order to avoid river crossings.

I wish you would go over this matter with Baxter and perhaps try some other line.

Yours truly. D. C. DODGE.

DENVER, COLO., *June 20th*, 1896.

E. J. Yard, Esq., chief engineer, etc.

DEAR SIR: I expect to go to Chicago next Tuesday. Will be gone about a week or ten days. Soon after my return will go to Utah prepared to make trip to head of Danials creek and perhaps a little further east.

Keep my office advised as to progress in Provo canyon also work on Sevier extention.

870 Will you have track completed to Elsinor by the end of the month? About what time will the station building be completed?

Yours truly. D. C. DODGE.

SALT LAKE CITY, UTAH, *July 14th*, 1896.

E. J. Yard, Esq., chief engineer.

DEAR SIR: Judge Harkness thinks you better at once prepare another map of Provo Canyon line so as to have it ready for filing without delay if it should be necessary on account of new form of certificate.

He suggests calling it an "amended map of the line." Better see him in regard to it, also in regard to amended certificate.

Yours truly, D. C. DODGE.

Telegram.

DENVER, 7, 26.

To E. J. Yard, Springville:

I think it would be better to complete through reservoir above the dam so far as possible before doing any work below.

D. C. DODGE.

DENVER, COLO., *July 27th*, 1896.

Work in Provo canyon.

Mr. E. J. Yard.

DEAR SIR: Your message of 25th inst. received. I think it would be better to move Deal's grading outfit up the canyon and complete so far as possible the grading through that portion of the canyon which the power company propose to take for their reservoir. I understand that there will be no trouble in securing right of way except through the Ferguson ranch.

Yours truly,

D. C. DODGE.

Telegram.

DENVER, 8, 2, 1896.

871 To E. J. Yard:

If I understand your message correctly namely thirty-two and one-half cents per yard cost about $1,000 you can close contract with them and have work started at once.

D. C. DODGE.

DENVER, COLO., *Aug.* 8, 1896.

Work in Provo canyon.

Mr. E. J. Yard.

DEAR SIR: Yours of the 6th inst. in regard to progress in Provo canyon received.

I note what you say about commencing work where our line crosses the proposed dam. I supposed we were working on the right of way we purchased from Murphey, but agree with you in seeing no reason why we should accept the power company's decision. I expect to meet Mr. Nunn some time during the week. If we are not able to settle our differences, or if we do not meet to discuss them, I will instruct Judge Harkness to commence suit. Everything should be got in shape so that there will be no delay when we decide what is best to be done.

Yours truly,

D. C. DODGE.

DENVER, COLO., *Aug. 24th*, 1898.

Provo canyon.

Mr. E. J. Yard.

DEAR SIR: I herewith send you a letter from Judge Harkness in relation to work in Provo canyon.

What objection is there to carrying out his suggestion? I can see there might be some objection to making any change in river bed.

Please return inclosed letter with your reply.

Encl.

Yours truly,

D. C. DODGE.

872

DENVER, COLO., *Aug.* 31, 1896.

Provo canyon.

Mr. E. J. Yard.

DEAR SIR: Some days ago I sent you a suggestion made by Judge Harkness and asked if there was any objection to carrying it out. I have received no reply.

Enclosed I send you a letter I have this day written to Judge Harkness. Please go to his office and get whatever suggestion he has to make as to the best point for commencing work to bring our matters with the power company to an issue.

Encl.

Yours truly,

D. C. DODGE.

DENVER, COLO., *Aug.* 31, 1896.

Provo canyon.

Hon. R. Harkness, western counsel, Salt Lake City, Utah:

Referring to your letter to General Palmer of August 27th, I am requested by General Palmer to instruct you to commence suits as indicated in your letter. I have written to Mr. Yard to call and see you and carry out your instructions in regard to the best point for doing work in order to bring up the issue between us and the power company. I think the sooner we get it in shape of a suit of some kind the better it will be for us. Anyway there is no use of our going ahead spending money until the matter is legally settled.

Yours truly,

——— ———.

DENVER, COLO., *Sept.* 3, 1896.

Work in Provo canyon.

Mr. E. J. Yard.

DEAR SIR: Yours of the 1st inst., in reply to mine of the 25th ult., inclos*ed* letter from Judge Harkness, is received, and I have sent same to Judge Harkness.

873 As I wrote you a few days since, the time has come when we desire to bring this case to an issue. Therefore I see no objection to your commencing work as you suggest just below the dam. If that does not bring the question to an issue I should try the channel change; but as the matter is left entirely with Judge Harkness, you will follow his directions in regard to it. The main point is to commence work somewhere that will bring it to an issue, if possible at once.

I have sent copy of this letter to Judge Harkness, together with blue print and your letter.

Yours truly,

D. C. DODGE.

DENVER, COLO., *Sept.* 14, 1896.

Sevier and Provo.

Mr. E. J. Yard.

DEAR SIR: Your letter of the 11th, in regard to Sevier matters, and of the 12th in regard to Provo canyon are received.

What does Judge Harkness advise in regard to doing further work in canyon, provided he gets an injunction? Of course, we do not wish to be to any further expense, until we settle definitely what our rights are in the canyon.

In regard to work in Sevier extension, I expect to leave here Wednesday and think now I will go direct to the end of the track, and would like to have you meet me at Thistle. Will let you know by telegraph.

Yours truly, D. C. DODGE.

DENVER, COLO., *Nov.* 10, 1896.

Mr. E. J. Yard.

DEAR SIR: I have not yet received your detailed statement of cost of line to Park City. How long before you will have it completed? Please make up a statement showing cost of Sevier from Salina to Belknap, giving the items not included in your estimate separate. Also the work south of Belknap.

Yours truly, D. C. DODGE.

874 DENVER, COLO., *Nov.* 27, 1896.

Provo and Sevier extension.

Mr. E. J. Yard.

DEAR SIR: Yours in regard to right of way through Ferguson's land in Provo canyon is received.

If power company allow their option to expire, we must get this right of way. See Colton and arrange with him for the payment.

Have just received your estimate of completion of Sevier railway from Belknap to Marysvale. I do not believe Colton will be able to pay for the work south of Belknap the first of January. I understood they were not to complete until February.

Yours truly, D. C. DODGE.

DENVER, COLO., *Nov.* 30, 1896.

Right of way—Provo.

Mr. E. J. Yard.

DEAR SIR: I wish you would go to Judge Harkness and have him draw up an ordinance covering what we want at Provo for our Park City line. I would like this attended to as soon as possible.

Also make up statement of what we want Provo people to do in regard to right of way between Provo and mouth of canyon, and send me copy of same.

Yours truly, D. C. DODGE.

P. S. See what Welby wants also.

DENVER, COLO., *Dec.* 17, 1896.

Park City extension.

Mr. E. J. Yard.

DEAR SIR: Yours of the 15th inst. together with blue print showing proposed entrance of Park City line into Provo, is received.

I think it would be well for Mr. Ricks to get option on the two pieces at the east end of the station ground at Provo. Of
875 course we will not want this additional land if we do not get what we want from the city of Provo, but we can afford to pay a few dollars for an option until that matter is decided, which should be within the next six months.

Yours truly, D. C. DODGE.

DENVER, COLO., — 24, 1896.

Mr. E. J. Yard.

DEAR SIR: Yours of the 22nd inst. advising me of having furnished Judge Harkness with tracing for line through Provo canyon, to a point near Charleston is received.

You better at once prepare map of the line from that point to Park City; also line on Daniels creek; leaving off the title until we decide whether to file in name of the Rio Grande railway or some other company, which I will know in a few days.

Yours truly, D. C. DODGE.

DENVER, COLO., *Dec.* 31, 1896.

Mr. E. J. Yard.

DEAR SIR: Your telegram of 30th inst. in regard to purchase of three and a half acres of land at Provo, is received. I suppose we take the land from agent after he has received deed from owner.

I have also received your letter of the 28th inst. in regard to purchase of Ferguson's land by local parties. If you have not already done so, I wish you would advise Judge Harkness.

Yours truly, D. C. DODGE.

876 DENVER, COLO., *Feb. 26th*, 1896.

Mr. E. J. Yard.

DEAR SIR: Your letter of the 24th inst. received and have telegraphed you as follows:

"Your letter of the 24th, enclosing blue print showing new street, provided it does not cost too much. Would lay track immediately upon securing right to do so."

I think the proposed line up H. street would be much better for a Park City connection, to say nothing about the additional local business. What will the right of way cost through the block where we turn off from main line? Of course we would want second track through to our depot.

How soon is the matter likely to come up?

Yours truly, D. C. DODGE.

877 DEF'TS' EX. 6. D. H. R.

PROVO CITY, UTAH, *April 24th*, 1896.

Whereas L. L. Nunn is desirous of purchasing all my right, title and interest, both in law and equity, to the property hereinafter described, and of obtaining a good and sufficient warranty therefor, conveying an indefeasible title,

Now therefore this agreement and presents witnesseth;

That for and in the consideration of the sum of one dollar to me in hand paid by said L. L. Nunn, the receipt whereof is hereby acknowledged, I do hereby promise, covenant and agree that at any time within ninety (90) days from the date hereof, I will make, execute and deliver to said L. L. Nunn or his assigns (if so required by him or them) and upon the payment of $2,500.00: a good and sufficient conveyance, conveying all my right, title and interest, both in law and equity, in and to the following-described property, to wit: That certain 160 acres of land situated in Provo canyon, Utah county, Utah, and known as the "Toll Gate," and upon which I am now living, the same being four forty-acre tracts lying lengthwise along Provo river in said canyon, and being in section 26, township 5, south of range 3 east, Salt Lake meridian, and I further promise and agree in consideration of said sum, to take all steps necessary to obtain title to said land (provided said L. L. Nunn, within said ninety (90) days will agree to pay the necessary fees and expenses therefor) and to homestead said land, or obtain title in any way desired by said L. L. Nunn, and to obtain title thereto; and I further covenant and agree as soon as title is obtained to convey to said L. L. Nunn or his successors or assigns, by good and sufficient warranty deed all my right, title and interest in and to said land, upon payment to me of the sum of twenty-five hundred dollars ($2,500.00).

In witness whereof I have hereunto set my hand and seal this 24th day of April, 1896.

W. W. FERGUSON.

Signed and delivered in the presence of

ELTON HOYT.
WILLIAM H. KING.

878 In the District Court, Fourth Judicial District, State of Utah, Utah County.

THE RIO GRANDE WESTERN RAILWAY Company, a Corporation, Plaintiff,
vs.
THE TELLURIDE POWER TRANSMISSION Company, L. L. Nunn, L. Holbrook, Sarah Ferguson, Frederick Ferguson, and William Ferguson, Defendants.

Proposed Amendment to Bill of Exceptions.

1. Page 102. Erase the written words "hereunto annexed and marked Ex. A." Allowed.

2. Page 711. In the written line insert the word "oral" before the word evidence, so it may read all the "oral evidence." Allowed.

3. In view of the bulk of some of the exhibits and the inconvenience of annexing maps, stipulate either party may use these on appeal to any court or courts as fully as if annexed, to wit:

Plaintiff's Ex. 2, articles of association;

Proof of organization and copy of articles approved by the Secretary of the Interior May 24, 1890.

See Reporter's Notes, p. 7;

Plaintiff's Exhibit 4, being same as map annexed to the complaint, and Plaintiff's Ex. 5, being map approved by the Secretary of the Interior, and Ex. A, put in by defendants, being first map filed in Land Office. See Reporter's Notes, top of p. 102 and p. 185.

Judgment-roll in case of The Rio Grande Western R'y Co. *vs.* The Telluride Power Transmission Co. L. L. Nunn and L. Holbrook, referred to Reporter's Notes, p. 181 and 236 & 699.

879 Add to bill these exhibits.

4. Order of district court, denying transfer. See notes p. 4, 5. Copy is furnished.

5. Plaintiff's Ex. 1. Order and opinion of U. S. court. The exhibit is furnished.

6. Statutes of Colorado put in evidence. Copy of the sections is furnished. See pages 6 and 699 Reporter's Notes.

7. Plaintiff's Ex. 6, resolution—the exhibit is furnished.

8. Defendants' Ex. 9, appeal proceedings. The exhibit is furnished.

9. Defendants' Ex. 7. Map of contour of reservoir. To be used as a separate exhibit. Copy annexed.

10. Plaintiff's Ex. 7. Holbrook notice.

11. Plaintiff's Ex. 9. Articles of incorporation of San Miguel Con. G. M. Co. Defendants' Ex. 9. Copy furnished.

12. Plaintiff's Ex. 10. Amendment to Ex. 9. Copy is furnished.

13. Plaintiff's Ex. 11. Certificate of secretary of State of Utah. Copy is furnished.

14. Add a statement, in middle of page 712 that the jury viewed the premises. Allowed.

BENNETT, H., H., B. & R.,
Att'ys for Pl'ff.

880 Fourth District Court Minutes, December Term, 1896, Friday, the Eighteenth Day of December, 1896.

Page 221.

THE RIO GRANDE WESTERN RAILWAY CO. vs. W. W. FERGUSON ET AL. } # 123.

In this cause, defendants' petition for transfer of said cause to the Federal court, of the State, came on to be heard. After hearing argument of counsel for the respective parties hereto, the court reserves its opinion till Monday, December 21st, 1896, at 2 o'clock, p. m.

A. C. HATCH, *Judge*.

Fourth District Court Minutes, Utah Co., Utah, December Term, 1896, Wednesday, the 23rd Day of December, 1896.

Page 225.

RIO GRANDE WESTERN RAILWAY CO. vs. W. W. FERGUSON ET AL. } # 123.

In this case the court having heretofore heard and taken under advisement defendants' petition for transfer, filed herein, now being fully advised renders its findings of fact and conclusions of law and denies said petition.

A. C. HATCH, *Judge*.

881 In the United States Circuit Court for the District of Utah.

THE RIO GRANDE WESTERN R'Y CO. vs. W. W. FERGUSON ET AL. } No. 167.

At this day comes plaintiff, by W. M. Bradley, its attorney. And the motion of said plaintiff to remand this cause to the district court of the fourth judicial district of the State of Utah, in and for Utah county, having heretofore come on to *he* heard and having been argued by counsel and submitted, and by the court taken under advisement, and the court being now sufficiently advised in the premises doth sustain said motion in accordance with the written opinion this day ordered filed herein, and doth order that this cause be and the same is hereby remanded to said district court; and it is further ordered by the court that the said Telluride Power Transmission Company and L. L. Nunn be adjudged to pay all costs arising in this action by reason of filing the same in this court under their petition for removal herein.

882 THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
W. W. FERGUSON, THE TELLURIDE POWER TRANSMISSION CO., L. L. NUNN, and L. HOLBROOK, Defendants. } No. 167.

Opinion by MARSHALL, *Judge:*

This suit was instituted in the district court of the fourth judicial district of the State of Utah. The object of the action was to condemn a right of way for a railway over certain land.

It was alleged in the complaint that prior to plaintiff's survey the defendant, Ferguson, had or claimed some possessory right to or occupation of the land. That the other defendants "claim some interest in or to said land appropriated by the plaintiff, or in the possessory right to the same, or to some easement therein." That the defendants were the only parties in possession of the land or claiming any right or title therein. That the plaintiff cannot contract for the purchase of the land. That defendant, Ferguson, refused to sell on the ground that he had contracted to sell to some of the other defendants, who also decline to sell on the pretense that they need the land for power purposes.

The prayer was that the extent of the defendants' occupation and the damages resulting to them from the taking, should be ascertained, and that upon payment of such damages the land should be condemned to plaintiff's use for railway purposes.

Within due time the Telluride Power Transmission Co. and L. L. Nunn presented to the State court a bond and petition for the removal of the suit to this court.

883 The petition stated in proper form the diverse citizenship of the plaintiff and the two petitioners and the jurisdictional value of the matter in dispute. It was also alleged that there was in the suit a controversy wholly between them and the plaintiff, namely, the ascertainment of the extent of their occupation of the land and a condemnation of a right of way over the land so occupied by them. That Holbrook had no interest in the controversy and claimed no interest in the land, "that the defendant, W. W. Ferguson, has contracted to sell and convey the lands described in plaintiff's complaint, and a portion of which plaintiff seeks to obtain right of way to deprive your petitioners, and said contract is still in force and binding and operative upon the parties thereto, and that by the terms of said contract all of said Ferguson's title, interest and right in and to said land passes and is transferred to your petitioners. Ferguson and Holbrook were not stated to be citizens of any State other than Utah, under whose laws the plaintiff was alleged to have been incorporated. The State court refused to order a removal of the suit, and the petitioners filed in this court a certified transcript of the proceedings. The plaintiff now moves to remand the cause.

The claim that there is a separate controversy between the plaintiff and the petitioning defendants must be tested by the allegations

of the complaint. All the statements in the petition for removal contradicting such allegations must be disregarded.

Louisville etc. R. Co. *vs.* Wangeline, 132 U. S. 599.
Graves *vs.* Corbin, 132 U. S. 571–585.
East Tenn. &c. R. Co. *vs.* Grayson, 119 U. S. 240.

The object of the suit is to condemn a single lot of land and the complaint shows that all of the defendants are necessary parties to a complete determination of that controversy, which, as stated by the Supreme Court of the United States in Bellair *vs.* B. & O. R'd Co. 146, U. S. 117–119 "was not the less a single and entire one,
884 because the two defendants owned distinct interests in the land, and might be entitled to separate awards of damages."

The complaint, it is true, states Ferguson's interest as of a date anterior to the institution of the suit and in the petition that interest, it is alleged, passes and is transferred to the petitioners by the contract referred to in the complaint. But there is no allegation that it had become vested in the petitioners at the time of the commencement of the suit, which was essential.

Ins. Co. *vs.* Pechner, 95 U. S., 183.
Stevens *vs.* Nichols, 130 U. S., 230.

The motion to remand must be sustained.

UNITED STATES OF AMERICA, } *ss:*
District of Utah, }

I, Jerrold R. Letcher, clerk of the U. S. circuit court for the district of Utah, do hereby certify that the above and foregoing are true and correct copies of the order of the court remanding the cause therein entitled and of the opinion of the court on said motion to remand, as the same appears on file and of record in my office, said order having been made and entered of record on the 29th day of March, 1897.

Witness my hand and the seal of said court, this 15th day of March, 1898.

[SEAL.] JERROLD R. LETCHER, *Clerk.*

Marked on back: #123. Provo City, Utah. Filed April 27, 1898. Geo. Havercamp, clerk. Plaintiff's Ex. 1. D. H. R.

885 *General Statutes of Colorado*, 1883. *Corporations.*

An act to provide for the formation of corporations.

General section 238 of the statutes.

SEC. 2. At any time hereafter any three or more persons (except as hereinafter provided) who may deside to form a company for the purpose of carrying on any lawful business, may make sign and acknowledge before some officer competent to take the acknowledgment of deeds, certificates in writing, in which shall be stated the corporate name of said company, the objects for which the company

shall be created, the amount of capital stock of said company, the term of its existance, not to exceed twenty years, except as hereinafter provided, save and except to make perpetual corporations insuring the lives of individuals which have been heretofore or may be hereafter organized under the laws of Colorado, the number of shares of which the said stock shall consist, the number of directors or trustees of said company, and the names of those who shall manage the affairs of such company for the first year of its existance, and the name of the town or place, and the county, in which the principal office of the company shall be kept, and the name of the county or counties in which the principal business shall be carried on; and they shall make as many such certificates as may be necessary, so as to file one in the office of the recorder of deeds in each of such county or counties, and one in the office of the secretary of state; and when any company shall be created under the laws of this State for the purpose of carrying part of its business beyond the limits thereof, such certificate shall state that fact, and shall also state the name of the town and county in this State in which the principal office of said company shall be kept, and shall state the name of the county in which the principal business of such company is to be carried on within this State.

Ditch companies.

SEC. 72. Whenever any three or more persons associate, under the provisions of this act, to form a company for the purpose of constructing a ditch for the purpose of conveying water to any mines, mills or lands, to be used for mining, milling or irrigating of lands, they shall, in their certificate, in addition to the matters required in section two (2) of this act, specify as follows: The stream or streams from which the water is to be taken; the point or place on said stream at or near which the water is to be taken out; the line of said ditch, as near as may be, and the use to which the water is intended to be applied.

Flume companies.

SEC. 80. When any company shall organize, under the provisions of this act, to form a company for the purpose of constructing a flume, their certificate, in addition to the matters required in the second section of this act, shall specify as follows: The place of beginning, the terminus, and the route so near as may be, and the purpose for which such flume is intended, and when organized, according to the provisions of this act, said company shall have the right of way over the line proposed in such certificate for such flume; provided, it does not conflict with the rights of any former fluming, ditching or other company.

886

Railroad corporations.

SEC. 117. It shall and may be lawful for any railroad company, or corporation, organized or existing under the laws of this State, and whose line of road is made or is in process of construction to the

bound-ry line of the State, or to any point either in or out of the State, under authority of its laws, to merge and consolidate its capital stock, franchises and property into and with the capital stock, franchises and property of any other railroad company or companies, or corporations, organized and existing under the laws of any adjoining State, or Territory, whenever the two or more railroads of the companies or corporations so to be consolidated shall or may from a continuous line of railroad with each other or by means of any intervening railroad; and roads running to a bank of a river which is not bridged, shall be held to be continuous under this section; provided, that nothing in this act contained, shall be taken to authorize the consolidation of any company, or corporation of this State with that of any other State or Territory, unless the laws of such other State or Territory permit or authorize such consolidation; provided further, that parallel or competing lines of railroad shall not be consolidated.

SEC. 118. Said consolidation shall be made under the conditions, provisions, restrictions, and with the powers hereafter in this act mentioned and contained, that is to say:

1. The directors of the several corporations proposing to consolidate may enter into a joint agreement, under the corporate seal of each company, for the consolidation of said companies and railroads, and prescribing the terms and conditions thereof, the mode of carrying the same into effect, the name of the new corporation, the number and names of the directors and other officers thereof, and who shall be the first directors and officers, and their place of residence, the number of shares of the capital stock, the principal place of business of the new company in each State or Territory traversed by its line of railway, and such other provisions as may be required by law to be inserted in an original certificate of incorporation, the manner of converting the capital stock of each of said companies into that of the new corporation, and how and when directors and officers shall be chosen, with such other details as they shall deem necessary to perfect such new organization, and the consolidation of said companies or railroads.

2. Said agreement shall be submitted to the stockholders of each of said companies or corporations, at a meeting thereof, called separately, for the purpose of taking the same into consideration; due notice of the time and place of holding such meeting, and the object thereof, shall be given by written or printed notice, addressed to each of the persons in whose names the capital stock of said companies stands on the books thereof, and delivered to such persons respectively, or sent to them by mail, when their post-office address is known to the company, and also by a general notice published in some newspaper in the city, town or county where such company had its principal office or place of business; and at the said meeting of stockholders, the agreement
887 of the said directors shall be considered, and a vote by ballot taken for the adoption or rejection of the same, each share entitling the holder thereof to one vote; and said ballots shall be cast in person or by proxy, and if a majority of all the votes of all

the stockholders shall be for the adoption of said agreement, then that fact shall be certified thereon by the secretary of the respective companies, under the seal thereof; and the agreement so adopted, or a certified copy thereof, shall be filed in the office of the secretary of state, and shall, from thence, be deemed and taken to be the agreement and act of consolidation, of the said companies; and a copy of said agreement and act of consolidation, duly certified by the secretary of state, under the seal thereof, shall be evidence of the existing of the said new corporation; provided, that if the mode of ratifying said agreement of consolidation in such other State or Territory shall vary from the mode herein prescribed, then such agreement may be ratified by the railroad company or corporation of such other State or Territory in the mode prescribed by the laws thereof.

SEC. 119. Upon the making and perfecting the agreement and act of consolidation, as provided in the preceeding sections, and filing the same or a copy with the secretary of state as aforesaid, the several corporations, parties thereto, shall be deemed and taken to be one corporation by the name provided in said agreement and act, possessing within this State all the rights, privileges and franchises, and subject to all the restrictions, disabilities and duties of each of such corporations so incorporated.

SEC. 120. Upon the consum-ation of said act of consolidation, as aforesaid, all and singular the rights, privileges and franchises of each of said corporations, parties to the same, and all the property, real, personal and mixed, and all debts due on whatever account, as well as of stock subscriptions and other things in action, belonging to each of such corporations, shall be taken and deemed *the* be transferred to and vested in such new corporation without further act or deed; and all property, all rights of way and all and every other interest shall be *a*ffectually the property of the new corporation as they were of the former corporations, parties by said agreement; and the title to real estate, either by deed or otherwise, under the laws of this State (or) of the United States, vested in either of such corporations, shall not be deemed to revert, or be in any way impaired by reason of this act, nor shall the lien, operation or effect of any trust deed, or mortgage heretofore executed by any of the corporations so consolidated be in anywise divested, impaired or affected; and the new corporation shall have the right to execute any future trust deed or mortgage upon its property, as shall be provided in the agreement of consolidation not inconsistent with the laws of this State, and all debts, liabilities and duties of either of said companies shall thenceforth attach to said new corporation, and be enforced against it, to the same extent as if said debts, liabilities and duties had been *e*ncurred or contracted by it.

888 The Rio Grande Western Railway Company.

NEW YORK, *June 9th*, 1896.

The following resolution, prepared by the company's counsel, is hereby approved and adopted.

Resolved, That the map and survey of a section of the company's line

of road, made by E. J. Yard, chief engineer, by direction of the company, and showing a location of twenty miles of the line of road between Provo, in Utah county, and Park City, in Summit county, beginning at a junction with the main line of the Rio Grande Western railway between mile-posts 80 and 81 in the southwestern part of the city of Provo, and extending thence twenty miles in a northeasterly direction, and following the course of the Provo river, through Provo canyon, to a point near the upper end of said canyon, about two miles from the town of Charleston, the survey of which was completed June 3, 1896, be and the same are hereby approved, and the location as shown by said map is approved as the definite location of the route and line of road of the company, for the distance and between the points shown by the map, and the proper officers of the company are directed to authenticate a map of said definite location, and file the same with the Secretary of the Interior, with a view to obtain the benefit of the act of Congress granting the right of way to railroads over Government lands.

(S'g'd)	WM. J. PALMER, *Director.*
(S'g'd)	GEORGE FOSTER PEABODY, *Director.*
(S'g'd)	GEORGE BARCLAY MOFFAT, *Director.*
(S'g'd)	SPENCER TRASK, *Director.*
(S'g'd)	D. C. DODGE, *Director.*
(S'g'd)	CHARLES J. CANDA, *Director.*
(S'g'd)	BARTHOLD SCHLESINGER, *Director.*
(S'g'd)	EDWIN PACKARD, *Director.*
(S'g'd)	J. C. PARRISH, *Director.*

I hereby certify that the foregoing is a true copy of a resolution adopted by the board of directors of the Rio Grand- Western Railway Company, June 9, 1896.

Witness my hand and the seal of the company, this 25th day of September, 1896.

[SEAL.] (Signed) CHAS. W. DRAKE, *Secretary.*

I, William F. Colton, assistant secretary of the Rio Grande Western Railway Company certify, that the above is a true copy of a resolution adopted by the board of directors of said company, on the 9th day of June, 1896, as stated, and as shown by the minute book of the company in my office.

Witness my hand and the seal of the company, this 13th day of April, 1898.

[SEAL.] WILLIAM F. COLTON.

Marked on back: Filed at Provo City, Utah. April 27, 1898. ——, clerk.

889 In the Supreme Court of the State of Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, Impleaded with L. Holbrook, Defendants.

Now come the said defendants, The Telluride Power Transmission Company and L. L. Nunn, defendants herein, and say, that in the final judgment rendered by the supreme court of the State of Utah, on the 7th day of December, 1897, and in the proceedings had prior thereto, certain errors were committed to the prejudice of said defendants which will more in detail appear from the assignment of errors to be filed as a part of the petition. And petitioners further say that in the final judgment and decree of the fourth judicial court in and for the county of Utah, State of Utah, a decision was had against the validity of and authority exercised by the petitioners under the laws of the United States which was drawn in question by said litigation; that by the answer in said cause, the defendants alleged that they had the right and authority from the United States, and were exercising it, to erect a dam in Provo canyon, for the purpose of creating water power to transmit electricity; that said right and authority existed under the mining laws of the United States originally enacted in 1866, and amended in 1872, Rev. Stats. sec. 2339, and the right of said defendants to build said dam, was denied by said plaintiff for the reason that said plaintiff claimed and alleged in said suit that said plaintiff had the right to
890 build a railroad up the said canyon, in the bed of the canyon where the dam would be, and had exercised the right prior to the said authority of the said defendants.

That the decision of the trial court, the fourth judicial district court in and for the county of Utah, was against the authority and validity of the claim of the said defendants, and the decision of the supreme court was against the validity of said authority claimed by said defendants.

Wherefor-, these defendants pray that a writ of error may issue in their behalf to the supreme court of the State of Utah, for the correction of the errors complained of, and that the transcript, papers and records in this cause, duly authenticated, may be sent to the Supreme Court of the United States.

ARTHUR BROWN,
HENRY P. HENDERSON,
Attorneys for L. L. Nunn and The Telluride Power Transmission Company.

Endorsed: Filed March 4th, 1898. Lilburn P. Palmer, clerk supreme court, Utah.

891 In the Supreme Court of the State of Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, Impleaded with L. Holbrook, Defendants.

On the first day of March, 1898, came the said defendants, by their attorney, Arthur Brown, and filed and presented herein a petition praying for the allowance of a writ of error intended to be urged by him; praying also, that a transcript of the records and proceedings and papers upon which the judgment herein was rendered and duly authenticated may be sent to the Supreme Court of the United States, and that such full and further proceedings may be had as may be proper in the premises.

In consideration thereof, I, Charles S. Zane, chief justice of the supreme court of the State of Utah, do hereby allow the writ of error upon the defendants giving bond according to law in the sum of one thousand dollars, which shall operate as a supersedeas bond.

CHARLES S. ZANE,
Chief Justice.

Endorsed: Filed March 4th, 1898. Lilburn P. Palmer, clerk supreme court of Utah.

892 THE UNITED STATES OF AMERICA, *ss:*

The President of the United States of America to the honorable the judges of the supreme court of the State of Utah, Greeting:

Because in the record and proceedings, as also in the rendition of the judgment of a suit which is in the said supreme court of the State of Utah before you, being the highest court of law or equity of said State in which a decision could be had in said *State* between The Rio Grande Western Railway Company, plaintiff, and The Telluride Power Transmission Company, and L. L. Nunn, impleaded with L. Holbrook, defendants, wherein was drawn in question the validity of an authority exercised under the United States, to wit, the authority to build a dam upon the public domain of the United States with a canyon situate on the public domain, to wit, within the Provo canyon, said dam to be built for the purpose of utilizing the power therein of the Provo river for the purpose of transmitting electricity, and the decision was against the validity of said authority, and manifest error hath happened to the great damage of said Telluride Power Transmission Company and L. L. Nunn, as by their complainant appears, we being willing that error, if any hath been, should be duly corrected, and full and speedy justice done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then under your seal, distinctly and openly, you send the record and proceedings aforesaid with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same at Washington within sixty days from the date hereof, and

that the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein, to correct that error, what of right and according to the laws and customs of the United States should be done.

Witness the Honorable Melville W. Fuller, Chief Justice of the said Supreme Court, the first day of March, 1898.

JERROLD R. LETCHER,
Clerk United States Circuit Court, Dist. of Utah.

Allowed by—
CHARLES S. ZANE,
Chief Justice of the State of Utah.

893 In the Supreme Court of the United States.

THE TELLURIDE POWER TRANSMISSION COMPANY and L. L. NUNN, Plaintiffs in Error,
vs.
THE RIO GRANDE WESTERN RAILWAY COMPANY, Defendant in Error.

And now come the said above-named plaintiffs in error, by Arthur Brown, their attorney, and say that in the record and proceedings in the above-entitled cause, there is manifest error in this, to wit:—

1. The court erred in holding that said plaintiffs in error did not have a right to construct a dam 85 feet high or other proper hight for the purpose of generating water power with which to transmit electric power.

2. The court erred in holding that the right of said plaintiffs in error to erect a dam for the purpose of generating electric power, was not prior and paramount to the right of defendant in error—plaintiff in the action below—to build a railroad.

3. The court erred in holding that said defendant in error—plaintiff in the action below—had acquired a right of possession to construct a railroad prior to the right acquired by plaintiff in error, to construct a dam.

4. The court erred in sustaining the 20th finding of the district court:—That,—"A dam raising the water 85 feet at Hanging rock, would flow the county road to a depth ranging from 70 feet to one foot, and the expense of said road above the reservoir on the side of the mountain, would be great, amounting to many thousand dollars."

5. The court erred in sustaining the decision of the district court in the 27th finding: "A dam that would raise the water 85 feet at Hanging rock, or any dam higher than one 15 feet high at Middle rock, would be, under all circumstances surrounding this
894 case, unreasonable, unnecessary and not in accordance with the customs and conditions of the country; hampering and thwarting other interests and enterprises of a public character from passing through this important gateway leading to the eastern portion of our country; and a higher dam in this locality is unneces-

sary in an adjustment of the relative right and interest of the parties, and of the public interests in the uses of said canyon."

6. The court erred in sustaining the conclusion of law of the district court:—"That the plaintiff, prior to the commencement of this suit, had the possession, right of possession, and the inchoate title subject to a condition subsequent, which could be performed at any time within a year after the Government survey, in and to said lands described in the complaint."

7. The court erred in sustaining the 3rd conclusion of law of the district court:—"That the defendants have never had the title, possession or right of possession to said lands or any part thereof, or acquire- any vested right in accordance with the laws or customs of the country, or any right to flow or otherwise occupy said lands, or any part thereof, or to prevent the use and occupation thereof by the plaintiff for railroad purposes, and that the adverse claim of the defendants to the said lands or the possession or occupation thereof is unfounded and invalid."

8. The court erred in its 4th conclusion of law:—"That the plaintiff (defendant in error) is entitled to judgment quieting and confirming its possession and right of possession of said lands as against the defendants and each of them and all persons acting under them from interfering with the plaintiff, (defendant in error) or interrupting it in the use and occupation of said lands, and from hindering and obstructing the plaintiff in the construction and operation of a railroad thereon and thereover. Also enjoining the defendants (plaintiffs in error) and each of them from erecting a dam in Provo river at any point or place which will flow a railroad to be constructed by the plaintiff on a grade of the survey now made therefor, on and over said lands."

895 9. The court erred in sustaining the judgment and decree of said district court, wherein it is decreed: "That the defendants have not, nor has either of them, at any time acquired or had any right, title, possession, or right of possession, in or to said lands or any part thereof, or any right to flow the same by a dam in said river or otherwise, and their adverse claim and the adverse claim of each of them to said lands and their claim of a right to flow or submerge the same is invalid, and the title, possession and right of possession of the plaintiff in and to said lands, for a right of way for its railroad, as against the defendants and each of them, is hereby adjudged valid and confirmed and quieted."

10. The district court erred in proceeding to try said cause and take jurisdiction thereof after a motion had been made which appears in the record to remove said cause and all proceedings subsequent to the filing of the petition and bond for removal were null, void, and without jurisdiction.

11. The supreme court erred in proceeding to hear and determine said cause and confirm the said judgment after objection made to the jurisdiction of the State court and in rendering a judgment therein after the filing of the petition and bond for removal.

12. The court erred in holding that the plaintiff was authorized by law to build a railroad in Provo canyon more than 10 years

after the original grant of franchise to the railroad companies of which plaintiff was consolidated.

13. The court erred in holding that plaintiff was not required by the statutes of Utah to begin the construction of the line from Provo through the Provo canyon within two years after the creation of plaintiff.

14. The court erred in holding that the franchise of plaintiff to build the road through Provo canyon, had not been lost by lapse of time under the statutes of Utah.

ARTHUR BROWN,
S. L. BAILEY,
H. P. HENDERSON,
Attorneys for Plaintiffs in Error.

896 In the Supreme Court of the United States? U. S. A.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, Impleaded with L. Holbrook, Defendants.

To the Rio Grande Western Railway Company, Plaintiff:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States, to be holden in Washington in the District of Columbia within 60 days from the date of this citation pursuant to the writ of error filed in the clerk's office of the supreme court of the State of Utah, at Salt Lake City, Utah, wherein L. L. Nunn and The Telluride Power Transmission Company are plaintiffs in error and you, The Rio Grande Western Railway Company, are defendant, to show cause, if any there be, why the judgment rendered against the said plaintiffs in error as in the said writ of error mentioned, should not be corrected, and why speedy justice should not be done to the parties in that behalf.

Witnesseth, the Honorable Melville W. Fuller, Chief Justice of the United States, this first day of March, one thousand eight hundred and ninety-eight.

CHARLES S. ZANE,
Chief Justice of the State of Utah.

Filed Mar. 4, 1898.
LILBURN P. PALMER,
Clerk Supreme Court, Utah.

897 In the Supreme Court of the State of Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, Imp-e-ded with L. Holbrook, Defendants.

Know all men by these presents that we, The Telluride Power Transmission Company, and L. L. Nunn, as principals, and L. Holbrook and F. R. Snow, as sureties, are held and firmly bound unto

the defendants, The Rio Grande Western Railway Company, in the full and just sum of one thousand dollars, to be paid to the said plaintiff The Rio Grande Western Railway Company, its certain attorneys or assigns, to which payment, well and truly to be made we bind ourselves, our heirs executors and administrators, jointly and severally by these presents.

Sealed with our seals, and dated the first day of March, in the year of our Lord one thousand eight hundred and ninety-eight.

Whereas, lately in the supreme court of the State of Utah, in a suit depending in said court, between the said defendants The Telluride Power Transmission Company and L. L. Nunn, and The Rio Grande Western Railway Company, plaintiff, a judgment was rendered against the said defendants The Telluride Power Transmission Company and L. L. Nunn, — having obtained a writ of error, and filed a copy thereof in the clerk's office of the said court, to reverse the judgment of the aforesaid suit, and a citation directed to the Rio Grande Western Railway Company citing and admonishing them to be and appear in the Supreme Court of the United States, to be holden in Washington in the District of Columbia within sixty days from the date of said citation.

898 Now, the condition of the above obligation is such, that if the said Telluride Power Transmission Company and L. L. Nunn, shall prosecute said writ of error to effect, and answer all damages and costs if they fail to make the said plea good, then the above obligation is to be void, else to remain in full force and virtue.

THE TELLURIDE POWER TRANSMISSION COMPANY,
By L. L. NUNN, *Gen. Mg'r.* [SEAL.]
L. HOLBROOK. [SEAL.]
F. R. SNOW. [SEAL.]

Sealed and delivered in presence of—
MORONI SNOW.

Approved by—
C. S. ZANE,
Chief Justice Supreme Court of the State of Utah.

March 1st, 1898.

STATE OF UTAH, } ss:
County of Salt Lake, }

L. Holbrook of Provo, Utah, and F. R. Snow of Salt Lake City, Utah, the sureties on the foregoing bond on appeal, being duly sworn, each for himself and not one for the other deposes and says: That he is a resident and freeholder in the State of Utah, and is worth the amount named in the foregoing bond over and above all his just debts and liabilities, exclusive of property exempt from execution.

[SEAL.]

L. HOLBROOK.
F. R. SNOW.

Subscribed and sworn to before me this 1st. day of March A. D. 1898.

MORONI SNOW,
Notary Public.

My commission expires May 10th 1900.

Endorsed: Filed March 4, 1898. Lilburn P. Palmer, clerk supreme court, Utah.

899 UNITED STATES OF AMERICA.

STATE OF UTAH, } ss:
County of Salt Lake, }

I, Lilburn P. Palmer, clerk of the supreme court of Utah, in pursuance of the attached writ of error, do return annexed hereto and to said writ, the original citation, transcript of the record and proceedings assignment of errors, together with a copy of the opinion, petition for writ of error, order granting writ of error and bond, all in and of said court and cause, to the Supreme Court of the United States; and I further certify that said copy of said opinion, petition for writ of error, order granting writ of error, and bond, is a full, true and correct copy of the several originals thereof on file or of record in my office.

In witness whereof I hereunto set my hand and affix the seal of said supreme court, this 10th day of March, A. D. 1898.

LILBURN P. PALMER.

900 *Notice.*

The undersigned hereby declares and publishes as a legal notice to all the world, that he has a valid right to take, at or near the point where this notice is posted, further described as follows to wit: at the confluence of the stream that forms Bridal Veil falls, with the Provo river, about eighty yards above the bridge across said river near Thayer's house, the waters of the Provo river, and convey the same by means of suitable dam, flume and pipe line, to a power station to be built near said river, and to use the water for the purpose of generating electric current, for furnishing light, and power and other beneficial purposes.

Dated this 5th day of Oct. A. D. 1894.

L. HOLBROOK, *Trustee.*

901 *Certificate of Incorporation of the San Miguel Consolidated Gold Mining Company.*

Know all men by these presents, that we, the undersigned, have associated ourselves together for the purpose of becoming a body corporate under the general incorporation acts of the State of Colorado, and for that purpose do hereby make, sign and acknowledge this certificate in writing, in triplicate, which certificate, when filed, shall constitute the articles of incorporation of said company:

ARTICLE I.

The corporate name of said company shall be the San Miguel Consolidated Gold Mining Company.

ARTICLE II.

The objects for which said company is created are as follows: To acquire by purchase, lease or otherwise, mining property, together with water rights, power, ways, mills and mill sites; to develop, mine, work and utilize the same, and to carry on a general mining business. To sell, lease, or otherwise dispose of any and all real and personal property, privileges and franchises belonging to it, including the power to mortgage the same for the purpose of borrowing money with which to make needed improvements, or to acquire other property.

ARTICLE III.

The capital stock of said company shall be fifteen million dollars ($15,000,000.00), divided into one million five hundred thousand shares, of the par value of ten dollars each. Said stock shall be non-assessable.

ARTICLE IV.

The term of the existence of said company shall be twenty years from the date of the filing of this certificate in the office of the secretary of State of Colorado.

ARTICLE V.

The affairs of said company shall be managed by a board of directors consisting of nine members. The names of said directors for the first year of the existence of said company shall be: Benjamin F. Butler, James Gilfillan, Albion Little, A. G. Drinkwater, T. E. Major, James Campbell, William Story, Frank R. Sherwin and C. E. Parker. In addition to their usual powers, said board shall have power to make all necessary by-laws, and, within the first year of its corporate existence, to enter into such contract on behalf
902 of said company, as to said board may seem proper and prudential, for the employment of some person as general manager, for a term not exceeding ten years, and to authorize said general manager to act for and on behalf of said company during the term of his employment, in any and all such matters as to them may seem wise and proper.

ARTICLE VI.

The principal office of said company shall be kept at Telluride, in the county of San Miguel, and State of Colorado. The principal business of said company shall be carried on in the counties of San Miguel, Montrose, Ouray, San Juan and Delores, in said State.

Provided, however, that a part of the business of said company shall be carried on in the city of Boston, in the Commonwealth of Massachusetts, and that the principal office of said company, be-

yond the limits of the State of Colorado, shall be kept at said city of Boston, and that regular and special meetings of the board of directors may be held at said last-mentioned place, as provided for in the by-laws of said company.

In witness whereof, we have hereunto set our hands and seals this 20th day of November, A. D. 1890.

A. M. WRENCH. [SEAL.]
F. E. WOODWARD. [SEAL.]
STEPHEN A. BAILEY. [SEAL.]

9021/2 STATE OF COLORADO, } ss:
San Miguel County, }

I, S. R. Fitzgerald, a notary public within and for said county, do hereby certify that A. M. Wrench, F. E. Woodward and Stephen A. Bailey, who are personally known to me to be the persons who executed the foregoing articles of incorporation, appeared before me this day in person, and acknowledged that they signed, sealed and delivered the same as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 20th day of November, A. D. 1890, at my office in Telluride, in said county.

S. R. FITZGERALD,
[SEAL.] *Notary Public.*

My commission expires September 29, 1891.

Endorsed: Articles of incorporation of the San Miguel Consolidated Gold Mining Company, domestic. Filed in the office of the secretary of state of the State of Colorado, on the 7th day of February, A. D. 1891, at 11.15 o'clock a. m. Recorded in Book 26, page 94. E. J. Eaton, secretary of state. By G. W. Temple, deputy. Fees, $1,500.00. Pd.

Also endorsed: "Pl'ff's Ex. '9,' D. H. R. Filed at Provo City, Utah, April 27, 1898. Geo. Havercamp, clerk."

903 Know all men by these presents: that at a special meeting of the stockholders of the San Miguel Consolidated Gold Mining Company, duly and legally called for the purpose of changing the corporate name of said company, and held on December 30, 1895, at its office in the town of Telluride, in the county of San Miguel, and State of Colorado, more than three-fourths of all the stock of said corporation then subscribed and in good faith outstanding, being present and voting at said meeting, the following amendment of article I of the articles of incorporation of said company, received the unanimous vote of the stock present at said meeting:

"ARTICLE I.

The corporate name of said company shall be the Telluride Power Transmission Company."

In testimony whereof, the president of said corporation has hereunto signed his name, and the same has been attested by the secretary thereof, and the seal of said corporation, both prior and subsequent to the change in name made hereby, is hereunto affixed.

JAMES CAMPBELL, *President.* [SEAL.]

Attest: H. R. NEWCOMB, *Secretary.* [SEAL.]

STATE OF NEW YORK, *City and County of New York,* } ss:

James Campbell, being first duly sworn, on his oath says that he is the president of the corporation named in the foregoing certificate, and that the facts therein stated are true.

Subscribed and sworn to before me, this 14th day of January, A. D. 1896.

My commission expires March 30, 1897.

THOMAS L. APPLEBARTH,
[SEAL.] *Notary Public, No. 25.*

Endorsed: Certificate of change of name. The San Miguel Consolidated Gold Mining Company, to the Telluride Power Transmission Company. Domestic. Filed in the office of the secretary of state of the State of Colorado, on the 15th day of February, A. D. 1896, at 11.55 o'clock a. m. Recorded in Book 52, page 222. A. B. McGaffey.

904 "UNITED STATES OF AMERICA.

STATE OF UTAH, *Salt Lake County,* } ss:

I, James T. Hammond, secretary of state of the State of Utah, do hereby certify that I have made a search, and find no record on file in my office of any copy of articles of incorporation of the San Miguel Consolidated Gold Mining Company, or of 'the Telluride Power Transmission Company,' or any copy of a resolution of the board of directors of either of said companies, or any paper purporting in the name of said companies, or either of them, to accept the provisions of the constitution of the State of Utah, or designating any agent in Utah upon whom process may be served; that my search extended back prior to the year 1889.

In testimony whereof, I have hereunto set my hand and affixed the great seal of the State of Utah, this 26th day of March, A. D. 1897.

J. T. HAMMOND,
[SEAL.] *Secretary of State.*

Endorsed: Pl'ff's Ex. "L." D. H. R. 123. Filed at Provo City, Utah, April 7, 1897. Geo. Havercamp, clerk. Pla'ff's Ex. "11," D. H. R."

905 I, Warren N. Dusenberry, judge of the district court of the fourth judicial district, State of Utah and before whom this cause was tried, do hereby, at the request of the defendants, The Telluride Power Transmission Company and L. L. Nunn, settle the foregoing bill of exceptions.

That the same contains all the testimony taken in said cause and many of the exhibits are hereto attached, but it was agreed by the attorneys respectively that all exhibits referred to therein, whether maps, books or documents, might be used on the hearing of said cause in the supreme court, or in any appeal from said court.

Settled and signed this 20th day of August, 1898.

WARREN N. DUSENBERRY, *Judge.*

We hereby acknowledge due service upon us this day of the foregoing proposed bill of exceptions.

Dated July 16th, 1898.

BENNETT, HARKNESS, HOWAT & BRADLEY,
THURMAN & WEDGWOOD,
Attorneys for Plaintiff.

O K. Judge may settle the bill as now amended Aug. 5, 1898.

BENNETT, H., H., B. & R.
Att'ys for Plaintiff.

906 In the District Court of the Fourth Judicial District, State of Utah, in and for Utah County.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, and L. Holbrook, Defendants.

Pleadings in Murphy Case.

Plaintiff complains of the defendants and alleges:

That the plaintiff is a railroad corporation, organized on or about the ninth day of July, 1889, in and under the laws of the State of Colorado and the Territory, now State, of Utah, and that it still continues to exist as a corporation, and that its corporate name is "the Rio Grande Western Railway Company."

That by the articles of agreement of incorporation it was organized and authorized and still is authorized to acquire, construct, maintain, and operate various lines of railroad and telegraph in said State of Colorado and in the Territory, now State, of Utah, and, among others, a line from Grand Junction, in Mesa county, in the State of Colorado, to Ogden, in Weber county, in Utah, passing through the city of Provo, in the county and State of Utah,

906–2 and that it has acquired and constructed and for several years operated said last-mentioned line and other lines of railroad in Utah.

That among other lines of railroad which the plaintiff is authorized to construct and operate in Utah are lines on and over the routes following, to wit:

A line from the city of Provo, in Utah county, to a point on the eastern boundary line of Utah where the same is crossed by the valley of the White river, passing into or through the counties of Uinta, Wasatch, and Utah.

A line from a point at or near Provo, in Utah county, to a point at or near the mouth of Duchesne fork of the Uintah river, in Wasatch county, passing into or through the counties of Utah, Wasatch, and Summit.

That said counties into and through which said lines of route pass are referred to as said counties were bounded at the time of the organization of the plaintiff company.

That the only feasible route for a railroad from at or near Provo City and thence northeasterly and easterly to either of said described routes is to go northeasterly up or in the direction of the Provo river to the mouth of Provo canyon, and thence up said Provo river and canyon to the summit of the Wasatch range of mountains, a distance of thirty miles, more or less, from the city of Provo, and that from the mouth of Provo canyon up said canyon and said Provo river the line of railroad on either of the routes above named must be in and up said canyon and the lines for that distance identical.

That in the year 1889 and soon after its organization the plaintiff filed with the Secretary of the Interior, at Washington, D. C., a copy of the articles of incorporation and due proofs of its organization under the same.

906–3 And the plaintiff alleges that on or about the 1st day of March, 1896, it commenced a survey and location of a line of railroad from a connection with its main line in the city of Provo aforesaid to the mouth of Provo canyon, and thence up said canyon and Provo river, and prosecuted said survey and location with diligence and completed the same for a distance of forty miles from the city of Provo, and that the said survey and location, to wit, from a point about six miles from Provo City and at or near the mouth of Provo canyon, thence up the same in the Provo river northeasterly for a distance of twenty miles, more or less, is upon both the lines of route specified in its charter, as aforesaid, and mostly upon unsurveyed lands of the United States.

That the plaintiff has made a map of said surveyed and located lines, and the survey and location thereof has been adopted by the plaintiff as the definite location thereof, and the plaintiff has commenced and is prosecuting the construction of its railroad on said line

That said line of survey passes over and into certain tracts of unsurveyed land of the United States which are situated in township 5 south, of range 3 east, of the Salt Lake meridian, and it is computed that when said township is divided said tracts will be the northeast quarter of the northwest quarter of section 34, the north half of the northeast quarter of section 31 and the southeast quarter of the southeast quarter of section 27, in said township and range.

And on information and belief the plaintiff alleges that prior to said location and survey one A. L. Murphy was in the occupation of said tracts of land and had or claimed some right to the possession and to future right to acquire the same by virtue of said occupation.

906–4 That the plaintiff, on or about the 5th day of March, 1896, appropriated and took possession, for railroad purposes and for its track and right of way, of a strip of land on and over the lands aforesaid so occupied by said A. L. Murphy and which the plaintiff had previously surveyed and located for said uses, described as follows:

A strip of land 200 feet wide, being 100 feet wide on each side of the center line of the survey and location across the land occupied by said A. L. Murphy, said center line beginning at a point marked 643+40, where said line crosses a fence between lands occupied by said Murphy and lands occupied by W. W. Ferguson, which point is computed to be 715 feet, more or less, north and 200 feet, more or less, west from where the common corner of sections 26, 27, 34, and 35 of said township and range will be when said township is subdivided; thence running in a southwesterly direction down the Provo canyon and river 3,500 feet, more or less, to a point which is 3,600 feet, more or less, northeasterly from a wagon bridge across said Provo river, and also is above 150 feet southwesterly from station 609+48 of the survey of said center line, containing sixteen acres, more or less, the stations referred to being the numbers of stations from the connection at Provo City and each being 100 feet.

And on information and belief the plaintiff alleges that on or about the 5th day of March, 1896, by virtue of a compliance with the act of Congress respecting rights of way for railroads, it became the owner of the right of way described, containing sixteen acres, more or less, subject only to the obligation to pay the said occupant, A. L. Murphy, damages to his possessory right, and on or

906–5 about the day last aforesaid the plaintiff contracted with said A. L. Murphy for the release and conveyance of all his right in and to said land, and afterwards and on the 22nd day of June, 1896, in pursuance of said prior contract, the said A. L. Murphy and his wife, Eurice Murphy, conveyed to the plaintiff all their right, title and interest in and to said lands, and that since on or about the 5th day of March, 1896, the plaintiff has been the owner and entitled to the possession and, except as the possession has been interrupted by the defendants, lawfully in possession thereof.

A map of the right of way of plaintiff on and over the lands described is annexed and made a part of this complaint and marked Exhibit "A."

And on information and belief the plaintiff alleges that the defendants wrongfully make, set up, and assert an adverse claim to said lands so owned by the plaintiff, and in pursuance of their said adverse claim have interrupted the plaintiff in pursuing the work of grading for its railroad on and over said lands, and by threats of force have stopped the plaintiff's work at places thereon and deny the right of the plaintiff to use said land for railway pur-

poses; that said land is of little value except for railroad uses, and the adverse claim of the defendants irreparably injures and damages the plaintiff and its estate in said lands.

And on information and belief the plaintiff alleges that the defendant The Telluride Power Transmission Company is or claims to be a corporation of the State of Colorado, and is exercising corporate rights.

Wherefore plaintiff prays that the defendants be required to set forth the nature and extent of their adverse claim to the
906–6 lands aforesaid; that their adverse claim be adjudged unfounded; that the title and right of possession of the plaintiff be confirmed, and that the defendants and all persons acting for them or claiming under them or either of them be restrained from asserting any adverse claim to said lands or the possession thereof or interfering with the plaintiff's possession pending the action, and that on trial the injunction be made perpetual; also for such other and further relief as may be proper, with costs of suit.

THURMAN & WEDGWOOD,
BENNETT, HARKNESS, HOWAT &
BRADLEY, *Attorneys for Plaintiff.*

Verified Sept. 10, 1896.

Indorsed: No. 923. Complaint. Filed Sept. 12, 1896. E. L. Jones, clerk.

Answer.

Now come the above-named defendants, and, answering plaintiff's complaint filed herein, allege:

That they have no sufficient information and belief to answer the first paragraph of plaintiff's complaint, and therefore deny that plaintiff is a railroad corporation, organized under the laws of the State of Colorado or the Territory or State of Utah, or a corporation at all, or that it still continues to exist as a corporation, or that its corporate name is the Rio Grande Western Railway Company.

And not having sufficient information and belief to answer the second paragraph of plaintiff's complaint, defendants deny
906–7 that by the alleged articles of agreement of incorporation or otherwise plaintiff was organized or authorized or is still authorized to acquire, construct, or maintain or operate various lines of railroad or telegraph in Colorado or Utah, or that it is authorized or organized to acquire or construct or maintain or operate a line from Grand Junction, Mesa county, Colorado, to Ogden, Utah, or that it has acquired or constructed said line or any line in Utah.

And not having sufficient information and belief to answer the third paragraph of plaintiffs' complaint, and basing their denial on that ground, defendants deny that plaintiffs are authorized to construct or operate a line from Provo, Utah county, to a point on the eastern line of Utah, or any line passing into or through the counties of Uintah, Wasatch, or Utah, or a line from a point at or near Provo, Utah county, to the mouth of the Duschesne fork of Uintah

river, Wasatch county, or any line passing into or through the counties of Utah or Wasatch or Summit.

And that the only feasible route for a railroad from at or near Provo City and thence northeasterly or easterly by either of said routes or any route is to go northeasterly up Provo river to the mouth of Provo canyon, or up said Provo river to the summit of said Wasatch range of mountains, or up said river, or that from the mouth of said Provo canyon up said canyon and said Provo river the line of said alleged or any railroad on either of said routes or any route must be in or up said canyon, or that the lines must be identical.

And not having sufficient information or belief to answer the fifth paragraph of plaintiff's complaint, and placing its denial on that ground, defendants deny that in the year 1889, or at any
906–8 time, plaintiff was organized or filed with the Secretary of the Interior, at Washington, D. C., a copy of its alleged articles of incorporation, or due proofs or any proofs of its organization under the same or otherwise. Defendants admit that in April or May, 1896, plaintiff ran a line up Provo canyon, but deny upon information and belief that on the first of March, 1896, or at any time, it has commenced a survey or location of line of railroad from a connection with its alleged main line in Provo to the mouth of Provo canyon, or up said canyon or river, or prosecuted said survey or location with diligence, or prosecuted it at all, or completed the same for a distance of 40 miles from Provo City, or any distance at all, or that it surveyed and located any line from a point near Provo City, near the mouth of Provo canyon, up said canyon or river northeasterly or otherwise for a distance of 20 miles or any miles, or that said alleged survey is upon the lines or any line or of routes specified in said alleged charter, or upon surveyed or unsurveyed lands of the United States.

And upon information and belief defendants deny that plaintiff has made a map of said alleged surveyed or located line, or that said alleged survey or location has been adopted by plaintiff as the definite location thereof or adopted at all, or that plaintiff has commenced or is prosecuting the construction of its railroad on said line or any line. Defendants admit that certain persons, claiming to be the agents of said alleged plaintiff, have during the summer and fall of 1896 ran on uncertain and irregular lines up said canyon without any apparent definite purpose or object, and that certain persons claiming to be the agents of said alleged plaintiff have at various points in said Provo canyon cut brush and made slight and unimportant excavations, which from their char-
906–9 acter give no evidence of any purpose or design on the part of any person to survey or construct any line of railroad. Defendants deny that plaintiff made any line or survey, as alleged in said survey, but admit that the uncertain and irregular line run by said persons mentioned in the foregoing paragraph in this answer pass over and into certain tracts of unsurveyed land; and deny that prior to said alleged location or survey, or at any time or at all, one A. L. Murphy was in the occupation of the land described in the

complaint or any part thereof, or had or claimed some right to the possession or future right to acquire the same by virtue of said occupation or otherwise or at all; and deny that the plaintiff, on or about the 5th day of March, 1896, or at any time, appropriated or took possession, for railroad purposes or for any purpose whatever or for its track or right of way, of the strip of land or any land over the land described in said complaint or any land occupied by said Murphy, or that said Murphy occupied any lands, or that plaintiff had previously surveyed or located any lands for railroad purposes or for its track, or that it had located or appropriated the strip of land described in said complaint, being 200 feet wide, as in said complaint described.

And deny on information and belief that on or about the 5th day of March, 1896, or any time, by virtue of the compliance with the act of Congress relating to the appropriation of lands, or by virtue of any act or at all, plaintiff became the owner of the right of way described in said complaint or any right of way, or that said alleged right of way contained 16 acres, more or less, or any number of acres, or that plaintiff was under obligation to pay A. L. Murphy any damages for his alleged possessory right, or that said
906–10 Murphy had any right, or that said Murphy was the occupant of any land, or that said plaintiff contracted with said Murphy for the release or conveyance of his alleged right to said land, or that on the 22nd day of June, 1896, or at any time, in pursuance of said alleged contract, the said Murphy or his wife conveyed to plaintiff all or any right, title, or interest in and to said land, or that since the 5th day of March, 1896, or at any time or at all, plaintiff has been the owner or entitled to the possession or has been in possession of said premises or any part thereof.

And upon information and belief deny that plaintiff has any right of way on or through the lands described in said complaint or as shown by Exhibit "A," annexed to said complaint.

And deny that defendants wrongfully make or set up or assert an adverse claim to said lands, or that plaintiff owns said lands or any part thereof, or that plaintiff graded for railroad purposes on said lands, or that by threats or force defendants have stopped plaintiff's work.

And deny that said land is of little value except for railroad uses, but, on the contrary, allege that said land is of great value for reservoir and canal purposes.

And deny that said claim of defendants irreparably or otherwise injures plaintiff or his estate in said land, or that plaintiff has any estate in said land.

And the said defendants further allege that the said defendant Holbrook has no interest in the subject-matter of this controversy. The said defendants, The Telluride Power Transmission Company and said L. L. Nunn, hereby deny that said court has any jurisdiction over them or the subject-matter of this controversy,
906–11 and protest and object to said court hearing said cause or taking jurisdiction thereof or over said defendants. They aver that it has no right to hear said cause or to require said de-

fendants to answer herein, and they hereby expressly declare that in answering said complaint they do not submit to the jurisdiction of said court or waive their rights to object to the trial of said cause by the said court, or to waive *to* dismiss the same for lack of jurisdiction over the subject-matter or over the defendants, or to move to remove said cause to the circuit court of the United States in and for the district of Utah.

Further, by way of answer, the said defendants, The Telluride Power Transmission Company and L. L. Nunn, affirmatively allege that the Telluride Power Transmission Company is a corporation duly organized and existing under the laws of Colorado, the stockholders thereof being citizens of the United States and all the stock of said corporation being owned by citizens of the United States; that said corporation was organized, among other things, for the purpose of acquiring, by purchase or otherwise, water rights, ways, and power, and to work, develop, and utilize water rights, ways, power, mills, etc., for such business and enterprises as appertain to the same, and that the said L. L. Nunn at all times herein mentioned was and still is a citizen of the United States.

That the Provo river, after leaving the Wasatch valley in Wasatch county, enters into a canyon which is wide at various points therein and flows a distance of about 20 miles in said canyon before emerging into what is known as Utah valley, in Utah county; that said river in the spring time and periods of high water flows
906–12 large quantities of water which are not used for agricultural or any other purpose, and which, by means of said river, flow down and escape into Utah lake, and that in the summer season and during the period of irrigation said river becomes low and flows but a small quantity as compared with the quantity therein in perio ls of surplus, as aforesaid; that said canyon is well adapted for a reservoir in which can be stored the surplus and unused waters, as aforesaid; that in periods of low water the amount so flowed down in said canyon is inadequate for the wants of the people residing in said Utah valley for agricultural and domestic purposes; that said Utah valley is populous and contains many large cities and towns which require heating and lighting and power for manufacturing purposes, and within short distances of said canyon are large mining camps, in which many important and producing mines are operated; that in the operation of said mines and the machinery used about the same and connected therewith power is essential and necessary and is only obtained by the burning of coal and coke and at great expense; that the production of electrical power for the operation of machinery and plants for lighting, heating, and for manufacturing and other pursuits has become an important enterprise and one which is of immense advantage to persons and localities, and is superseding other means of supplying the necessary power to carry on said pursuits; that said defendants for years have been engaged in acquiring water rights for power purposes, and in the year 1894 they entered upon said Provo canyon and had extensive surveys made with a view to determining whether power could be obtained with which to supply said towns and cities in said Utah valley

and said mining camps, and also whether by reservoiring the
906–13 surplus water additional power could be obtained and water obtained for agricultural and domestic purposes; that said surveys were prosecuted with diligence, and said defendants in said year determined to acquire in said canyon water rights for the purpose of generating electrical power and to irrigate the lands in said valley below; that the greater part of said lands in said canyon were unoccupied and unsurveyed and were, except in few cases, of but little or no value except for the purposes designated by said defendants; that said defendants took possession of a large portion of the public domain lying in said canyon, and commencing at a point at or near what will be, as nearly as defendants can determine when surveyed, the southwest corner of the southeast quarter of sec. 27, in township 5 south, of range 3 east, and extending up said canyon and on both sides of said Provo river a distance of about 5 miles, for the purpose of constructing a reservoir thereon, and also took possession and entered into the occupation of other public lands below said point first mentioned for the purpose of constructing canals, flumes, and small dams in order to carry out the purpose and enterprise aforesaid; that the point first mentioned in said sec. 27 and the land above in said canyon, until the land then occupied by W. W. Ferguson was reached, was vacant and unoccupied at the time said defendants entered said canyon, and they then and there took possession of the same and entered upon the actual occupation and possession thereof; that at or near said southwest corner of said sec. 27, upon each side of said river, large cliffs of rocks projected from the mountain and approached close together in the bottom of said canyon and formed a suitable and proper place for the
906–14 construction of a dam; that said defendants, after extensive surveys had been made, began in the year 1895 the construction of a flume and commenced the necessary excavations therefor, in order to obtain power with which to aid in the construction of a large dam at the point aforesaid by which to reservoir and hold back the waters of said river for power and irrigation purposes; that defendants had the necessary surveys for canals made for the purpose aforesaid and surveyed a reservoir site, beginning at or near the point where said rock cliffs projected into said cliffs, and showed upon the surveys so made the contour of the line of said reservoir and prosecuted with due diligence the work necessary for the construction of the enterprise entered upon.

Defendants further aver that in the winter of 1896 and in the early spring of 1896 they vigorously prosecuted said work and expended large sums of money in said surveys, flumes, excavations, etc.

Defendants further aver that long prior to the time when plaintiff alleges it entered into said canyon they in good faith entered upon said public, unsurveyed land of the United States with the design and specific purpose of constructing in said canyon, at the point aforesaid, a large and expensive dam by which to reservoir and store said surplus waters of Provo river; that they surveyed said reservoir, extending the lines of survey up said river from said

point at or near sec. 27, in Utah county, to a point at or near the northeast corner of the northeast quarter of the southwest quarter of sec. 27, township 5 south, range 4 east, of Wasatch county, Utah, and duly marked upon the ground the contour of the line of said survey.

906–15 Defendants further aver that they have located a reservoir, the necessary canals connecting with said reservoir, and that since the year 1894, as aforesaid, they have been in the actual, notorious, visible and peaceable possession and occupation, except as stated hereafter, of the lands described in plaintiff's complaint and between the points aforesaid, as well as the land lying west and below in said canyon, where surveys for canals and flumes have been made, except the claim of W. W. Ferguson, lying in said canyon, has been occupied by said Ferguson, but defendants allege that they have contracted to purchase the same from him and have paid him a large sum of money therefor.

Defendants further aver that when they entered upon said land the said A. L. Murdock was not in possession thereof, and that he never has been in the possession or occupation of said land or any part thereof and has not and never did have any right, title, claim, interest, or property in and to the land described in plaintiff's complaint or any part thereof or any land in said canyon or any lands so occupied and possessed by said defendants; but defendants allege that they during all the period aforesaid have had open and notorious possession thereof; that said possession has been actual and *bona fide* and with the full knowledge of the said plaintiff, and that the said plaintiff well knew, long before the time alleged in said complaint of its entry into said canyon, that defendants were in possession of said public domain and were engaged in the constructions of flumes and dams and a reservoir for the purpose herein stated. Defendants aver that in good faith they have prosecuted with vigor the enterprise engaged in and have expended a large sum of money, to wit, more than $50,000.00, in said enterprise, and that it

906–16 has been and now is their intention and purpose to complete said dam, and to store the waters of said river in the reservoir so constructed, and to use the same for the generation of electrical power for heating, lighting, manufacturing, and other purposes, and also to use said water for irrigation and domestic purposes.

That by means of said dam they will be able to obtain more than 8,000-horse power, which will be sufficient to supply said Utah county and the towns and cities therein with power for heating, lighting, and manufacturing purposes, and also said mining camps, and will prove a great and lasting benefit to said cities and the persons using the same, and will aid in the development of mining, manufacturing, and other industries which will prove of great advantage and benefit to Utah and its inhabitants.

In addition thereto, defendants aver that by means of the water so stored and reservoired they will be able to supply water for irrigation purposes, and that large quantities of unoccupied and sterile

public land will be brought into cultivation, to the permanent advantage and prosperity of the State.

Defendants further allege that said plaintiff, some time in the summer of 1896, wrongfully and maliciously and for the purpose of annoying said defendants and interfering with their project and enterprise, came into said Provo canyon and ran irregular, indefinite, and devious lines through a portion of said canyon, pretending that it was the purpose to establish a railroad therein; but defendants allege that said lines so run were so irregular, so uncertain, so shifting and changing as to indicate no such purpose; that
906–17 in two or three points in said canyon various persons claiming to represent said plaintiff made slight excavations, but the character thereof was such as to indicate no purpose to construct a railroad or to perform intelligently or with a settled or fixed purpose any enterprise; but defendants upon information and belief allege that said plaintiff has no purpose or design to construct a railroad in said canyon, but that what has been done has been done with a view to annoy said defendants and to prevent them from constructing their reservoir and canals and from obtaining electrical power for the purposes aforesaid, and also for the purpose of preventing any legitimate railroad undertaking from being consummated if the operation of a line through said canyon was essential to said undertaking.

Defendants allege that the construction of a road along the bottom of said canyon would be destructive to their enterprise and reservoir power and would prevent them from carrying out the work in which they have been and still are engaged and which they were prosecuting long prior to the spasmodic, uncertain, and *mala fides* entry of said plaintiff into said canyon.

Defendants further allege that they are in the actual possession of the land described in said complaint and have been for more than two years last past, as well as other lands in said canyon, as above set forth, and that while in such possession and while engaged in the construction of dams, canals, flumes, reservoirs, and in the making of surveys, and while in the actual, peaceable, notorious, and open possession of said unoccupied public domain, persons claiming to represent the said plaintiff, entered said canyon in the summer of 1896 and pretended that they desired to survey
906–18 across said land, and while the said defendants were so engaged and so in possession as aforesaid said persons ran said indefinite and uncertain lines through a portion of said canyon.

Defendants further allege that said plaintiff nor any other person has any right to intrude upon their possession and occupation of the said lands described in said complaint or to prevent them from carrying out their enterprise so important and beneficial to the people of Utah.

Defendants further allege that to complete their said enterprise and said work the completion of said dam is necessary and the reservoiring of said water in said canyon is absolutely imperative, and that if said plaintiff or any other person shall construct a railroad

in said canyon it will prevent the completion of said dam and reservoir, and will absolutely destroy the said enterprise upon which defendants have entered, and they will be despoiled of the rights and property acquired by them and will suffer great and irreparable damage and injury. Defendants aver that said enterprise and the work so undertaken by them and the site thereof are of great value, to wit, of the value of more than $500,000.00, and that if a railroad were constructed along the bottom of said canyon they would be damaged in a sum in excess of that amount; that the construction of said dam and reservoir and the creation thereby of electrical power for the purposes aforesaid and to the extent aforesaid, and the obtaining of water for agricultural and domestic purposes as aforesaid, are of higher and infinitely greater importance than the construction of a line of railroad through said canyon, and the exercise of the right of eminent domain, contended for by plaintiff in said complaint, over the land in said complaint described
906–19 would prevent the defendants from completing said work and render valueless all that they have done.

And defendants deny that said plaintiff can exercise the right of eminent domain as against the said defendants and for the purpose of destroying an enterprise and work of such magnitude as that upon which defendants have entered, and they allege that it is not within the contemplation of the statute to allow the right of eminent domain to be exercised under circumstances such as are alleged herein and as prevail in this case, and that this court has no right to entertain plaintiff's complaint or to grant the relief prayed for in said complaint.

Defendants further aver that said plaintiff well knew defendants' intention and the character and extent of their claims, the possession and occupation of said lands and said reservoir site long prior to the time when said persons claiming to represent said plaintiff entered said canyon to run said irregular and uncertain surveys, and that to permit the said plaintiff to condemn the said land and to deprive defendants of their possession and occupation of said public domain and to deprive them of their right, interest, and property in and to said land described in plaintiff's complaint and to destroy their said enterprise and to compel them to vacate and abandon said canyon and said reservoir and the canals and work done and performed by them would be a grievous wrong and fraud upon their rights.

Wherefore said defendants pray that said court refuse to entertain said complaint or to assume jurisdiction of the alleged cause
906–20 of action therein set forth or to grant any relief to said plaintiff or to condemn or dispossess defendants of said lands herein described and in said complaint set forth.

Defendants further pray that said plaintiff take nothing by its complaint, and that the defendants may have their costs herein expended.

BROWN, HENDERSON & KING,
Attorneys for Defendants.

Verified Feb. 1, 1897.

Indorsed: Title of court and cause. Filed at Provo City, Utah, Feb. 2, 1897. Geo. Havercamp, clerk, by R. B. Thurman, dep.

907 *Findings of Facts.*

1st. That the plaintiff is a railroad corporation organized under and in pursuance of the laws of the State of Colorado and of the Territory of Utah, on or about the ninth day of July, 1889, by the consolidation of the Denver and State Line Railway Company, a railroad corporation of the State of Colorado, and the Denver and Rio Grande Western Railway Company, a railroad corporation of the Territory of Utah, and under an agreement and articles of association for fifty years, containing all provisions required for railroad corporations by the laws of said State and Territory. Said corporation filed with the Secretary of the Interior at Washington a copy of its articles of incorporation and due proofs of its organization under the same, as required by the act of Congress, chapter 152, approved March 3, 1875, entitled "An act granting to railroads the right of way through public lands of the United States."

2d. The articles and agreement of incorporation of the
907–1 plaintiff, among other lines and routes which it was organized to construct and operate, described the lines and routes set forth in the complaint, and the only feasible route for a railroad from a point at or near Provo City, by either of the routes specified in the complaint, is up the Provo river and canyon, from the mouth of said canyon (which is about six miles from Provo City in a northeasterly direction) to or near the summit of the Wasatch range of mountains, a distance of about thirty-five miles from the mouth of the canyon, and there is no other practicable route for a railroad, through any canyon or pass in the Wasatch range of mountains, for a long distance north and south of Provo City, and following in the general course the lines and routes named in the complaint.

3d. That the Provo canyon, through which the Provo river runs, from its mouth for a distance easterly of about ten miles, is narrow at the bottom and at most places with steep, rocky sides, and at points where tributaries of the river come into the canyon the bottom of the ravines in which they flow are narrow and their sides steep and rocky.

4th. A county road goes up the bottom of Provo canyon, near to, but above the level of the water, and at places crosses the river by bridges, and this road has been used by the people since the first settlement of the country, and is the only means and route of travel from Provo and the Utah valley eastward through and over the Wasatch range of mountains.

907–2 5th. The plaintiff commenced at Provo City a location and survey of a line of railroad from a connection with its main line in Provo City, and thence northeasterly to the mouth of Provo canyon, on the 23d day of March, 1896, and diligently prosecuted the location, survey and staking of a continuous line, and reached, located, surveyed and staked its line up to the point hereinafter

called the Hanging rock, and to the lands in controversy on the 10th day of April, 1896, and thence continued locating, surveying and staking its line up said canyon and to Charleston, a distance of twenty-three miles from Provo City.

6th. This location and survey was made in good faith and with intent to construct a line of survey, and to appropriate for the use of the railroad a right of way over the public lands of the United States. The location so made at and along these parts of the canyon in controversy was on the north side of the river, and a map of a section of twenty miles of the railroad, as surveyed, was afterwards made in accordance with the survey, and said section of twenty miles was partly surveyed and partly on unsurveyed lands of the United States.

7th. The plaintiff, on or about the last days of June, 1896, commenced, through contractors, grading for its road-bed on the north side of the river, and on the line located as above stated, at a point above what is known as Hanging rock, and on what was called the Murphy land.

907–3 8th. Prior to the 8th day of July, 1896, the plaintiff surveyed for a change of alignment from the north to the south side of the river, for a distance of about four miles, and about the 1st of July, 1896, adopted the change in alignment, and moved the graders, who were then at work on the north side, to the south side of the river, and they commenced work on the particular strip of land described in the complaint, and continued to work there until stopped by the defendants, as set forth in the complaint; but afterwards did some work further up the river before stopping work in the canyon, and the reason assigned for stopping work was the controversy as to the right to construct a road on the grade at the level of the survey.

9th. The change of alignment, from the north to the south side of the river, was made in good faith, for the purpose of getting a better line, and one that would not interfere with the work the defendants were then prosecuting, and such change asserted or maintained no new or additional claim. The line was at, or practically near, the same level as the first one, and the changed part connected at either end and with the first line, and, besides, any height of water that would flow from the changed part of the line would also flow the piece of land on the north side which was abandoned.

10th. The strip of land in controversy, and the line of route of the railroad for some distance east and west of said strip, is on and over unsurveyed lands of the United States, and the first

907–4 line surveyed on the north side of the river, and later abandoned, was also on unsurveyed lands of the United States, and from the evidence, if unsurveyed, would be in the same government subdivision.

11th. The defendant, The Telluride Power Transmission Company, from the evidence, is a mining corporation of the State of Colorado. Its certificate of incorporation as "The San Miguel Consolidated Gold Mining Company," was filed with the secretary of the State of Colorado, February 7, 1891. The laws of Colorado

require the certificate, if business outside of the State was contemplated, to name the place or places of business. The certificate named no place of business outside of Colorado, except the city of Boston in the Commonwealth of Massachusetts.

By its articles the objects for which the company was created were: "To acquire by purchase, lease, or otherwise, mining property, together with water rights, power ways, mills and mill sites; to develop mine work and utilize the same, and to carry on a general mining business."

By amendment to the certificate filed in the office of the secretary of State of Colorado, on the 15th day of February, 1896, the name of the corporation was changed to "The Telluride Power Transmission Company," and no other change was made.

Neither the San Miguel Consolidated Gold Mining Company, nor the Telluride Power Transmission Company, has filed in the
907–5 office of the secretary of the Territory of Utah, or the secretary of the State of Utah, any copy of its articles of incorporation, or of its by-laws, or any appointment of an agent on whom service can be made, or any paper or document relating to said companies or either of them.

12th. The defendant, L. L. Nunn, is a native citizen of the United States, residing in the State of Colorado, and has been and is the general manager of the Telluride Power Transmission Company; and the defendant, Holbrook, is a native citizen of the United States, residing in Utah.

13th. That in Provo canyon there are points referred to in the testimony of this case, as follows:

The county bridge, which is about four miles from the mouth of Provo canyon, and about 5,600 feet below Hanging rock.

A point called Middle rock is about 3,900 feet below Hanging rock.

Hanging rock is about 5,600 feet above the bridge, and is the place where the defendants claim the right to raise the water to a height of eighty-five feet by means of a dam. At this point a rock about eighty-five feet high projects into the canyon from the north side, and a point of rock about forty feet high projects into the canyon from the south side, and the distance across the canyon between these rocks is about 300 feet, and the river flows between these rocks.

The strip of land directly in question is on the south
907–6 side of the river and extends about eighty rods or more, above Hanging rock, and down the river to a point below Middle rock.

14th. On or about October 5, 1894, the defendant, Holbrook, by the directions of the defendant, Nunn, put up a notice about 200 feet above the county bridge, which notice was afterward recorded, as follows:

Notice.

"The undersigned hereby declares and publishes as a legal notice to all the world that he has a valid right to take at or near the point where this notice is posted, further described as follows, to wit: At

the confluence of the stream that form Bridal Veil falls with the Provo river, about eighty yards above the bridge across said river, near Thayer's house, the waters of the Provo river, and convey the same by means of suitable dam, flume and pipe line to a power station to be built near said river, and to use said water for the purpose of generating electric current, for furnishing light and power and other beneficial purposes.

Dated this fifth day of October, A. D. 1894.

L. HOLBROOK, *Trustee.*"

In the fall of 1894 a level line was run and marked down the river from a point near this notice, toward the point mentioned as a site for a power plant, and some brush cut that fall and winter; but no other work has been done at or near this point, and the defendants, as early as May, 1895, abandoned any intention of diverting or appropriating water at or near said point or under said notice.

15th. In May, 1895, the chief engineer of the defendant decided on Middle rock as the point of diversion of what he calls the
907–7 temporary plant, and in the fall of 1895, surveyors, acting for the defendants, or some of them, run several trial level lines at and from the point called Middle rock, about 3,700 feet above the Holbrook notice, and run at least three of said lines on the north side of the river. They were run with a level and marked with brush stakes, and at places small flags or markers on the stakes, and sufficient brush was cut at places on the lines to enable the lines to be followed.

The lines were not measured or divided into regular distance stations. The upper line was sixty feet above the level of the river at Middle rock, and was extended up the river to a distance of about a mile above Hanging rock, and also down the river a distance of about one mile.

The middle line was about thirty feet below, and did not extend above the base of Hanging rock. Nothing further has ever been done on the middle line. The lower line, at the upper end, was run to connect with the river, or a small dam at Middle rock. After running these lines in the fall of 1895, they had brush cut off the line of the lower line and commenced preparing the ground for a permanent survey and grading. About this time there was set on the bank of the river near the point where the lower line would connect with the river, and from twelve to fifteen feet above the water level, a stake marked "top of dam," and this stake stood there until August, 1896.

907–8 16th. On the twenty-fourth day of March, 1896, a surveyor representing the defendants, or some of them, went to the ground and began a preliminary survey for the flume bed on the lower level; and on the twenty-seventh of March, by the directions of the chief engineer, he posted a notice in two places, to which he, or the chief engineer, put the name of defendant Nunn; one copy being posted at the Middle rock, on the sixty-foot level above the river, and one at a place called Deer creek, about seven miles above Middle rock, which notice was as follows:

"I hereby claim for the purpose of constructing a reservoir, all land lying up this stream, below the level of this point, and propose to use the same for a reservoir, by the erection of a dam at this point, so constructed that it will contain the water of this stream on a level with this notice. I propose to use the water for agricultural and manufacturing purposes. The water to be conducted from this point to the mouth of the canyon, and thence to the benches of Utah valley.

L. L. NUNN.

March 27, 1896, Utah county, Utah."

A surveyor then commenced a survey of the contour of a reservoir on the sixty-foot level, working intermit-ently on that and on work on the lower level below Middle rock, until the twentieth of April, at which time he had reached about two miles up the river, and then stopped, and no further work was done on a survey of such a reservoir. The work on this survey was stopped by or under the direction of the defendant, Nunn, who declared this notice was a mistake, and that he did not intend a sixty-foot dam at that place, but intended a dam to raise the water eighty-five feet at
907-9 Hanging rock, and then directed the survey of the contour of a reservoir on the eighty-five-foot level at Hanging rock.

On the twenty-fifth day of April, 1896, a surveyor commenced, and on the fifth day of June, 1896, completed a survey of a contour of a reservoir on the eighty-five-foot level from Hanging rock, which was made with an angle line, and at the point of beginning, and at each angle of the line a stake was set and marked "Water level Provo Canyon reservoir." No written or printed notice other than those stakes has ever been given for an eighty-five-foot dam or reservoir.

On April 4, 1896, another surveyor representing the defendants, or some of them, went to the ground with a small force and commenced preparing the bed for a flume on the lower level from Middle rock down the canyon, and he increased his force on the sixth of April, and again on the tenth of April, 1896.

About the middle of May, 1896, he did some work and excavating on the sixty-foot level near the Middle rock, and had the brush cut on the line to about the distance of 100 feet above Hanging rock.

Some time in the summer of 1896 two small pits were sunk in the bed of the canyon, between the projections of Hanging rock, with a view to discover bed rock for the foundation of a dam, but the bed rock has not been found; and in the side of the canyon above Hanging rock some small pits were made to discover what amount of gravel or other material could be found to fill in above a dam.

907-10 No other work has been done on or towards the construction of a dam at Hanging rock.

17th. In the summer of 1896 the defendants, or some of them, completed the grade for a flume joining the river, or a small dam at the river, at the Middle rock, and have put upon the bed 4,000

feet of flume down the canyon, with a capacity of 12,000 cubic feet per minute. The bottom of the flume where it would join the river at Middle rock is four or five feet above the river bottom, and the height of the flume is about six feet, and a dam at this point, fifteen feet high, would flow about forty acres of land, and be ample to divert the water of the river to the flume.

The expenditure of the defendants in their work, which amounts to about $45,000.00, have nearly, and substantially all been made for this flume, and to divert the water at its head, but no dam has been commenced at that point.

18th. The minimum flow of the river at the dryest time is 9,000 cubic feet per minute, and the fall from Middle rock to the mouth of the canyon is about 356 feet, and 12,000 cubic feet per minute in the flume would give net —— delivered on the wire from the dynamos 5,870-horse power. The minimum flow of the river of 9,000 cubic feet would give net 4,400-horse power. The flume has a grade of one foot to 1,000 feet.

The defendants claim they contemplate a canal on the 60-foot level, which would require steeper grade, and the power of the additional height would be proportionately lost in grade.

907–11 19th. There is no evidence of a requirement or market for 10,000-horse power, except that the defendant, Nunn, testified from an investigation that there existed a market at Mercur and Tintic districts and elsewhere for that amount of power; but the requirements for such an amount of power is only a general estimate, and no requirement or need is shown for any definite or particular amount at any definite place or for any specified business; and it is shown that the Telluride Power Transmission Company, with three dams, only generate 4,000-horse power at Telluride.

20th. A dam fifteen feet high would not flow or injure the line of plaintiff's railroad, as surveyed, and the survey of the railroad allows for a dam at that height. Such a dam, if it flowed the county road at all, would only flow it for a short distance and at a place where it could be moved without much expense and without leaving the lower part of the canyon. A dam raising the water eighty-five feet at Hanging rock would flow the bottom of the canyon for over four miles above that point, and flow the county road to a depth ranging from seventy feet to one foot, and the expense of carrying said road above such a reservoir upon the side of the mountain would be great, amounting to many thousands of dollars.

A dam raising the water eighty-five feet at the Hanging rock would require a change of grade of the railroad for about nine miles at an increased cost for the grade of about $20,000.00

907–12 per mile; would increase the maximum grade in the canyon and the costs and dangers of operation, and such a reservoir would flow back the waters of the river in its tributaries, known as North and South forks, and require a long trestle over the North fork and across the ravine in which it flows.

At a place called Deer creek, about five miles above Hanging rock, a dam can be constructed for storage purposes, at an expense of about one-fourth of that required for an 85-foot dam at Hanging

rock, and with equal storage capacity; and such a dam would fill every necessary requirement, and would interfere with the uses of the canyon for other purposes, and in a much less degree than an 85-foot dam at Hanging rock.

21st. The controversy as to the particular lands in question involves the use of the whole canyon above Hanging rock for miles, and also below Hanging rock for a long distance, on account of the necessity of commencing a raised grade for a long distance below that point, in order to overcome the construction of a dam at Hanging rock.

22d. The defendant, Holbrook, disclaims personal interest, but denies the right of the plaintiff. The other defendants made and make an adverse claim to the lands in controversy as set out in their answer.

23d. The defendants never intended to erect a dam sixty feet high, or to any height exceeding fifteen feet, at the Middle
907–13 rock, or in pursuance of the notice dated March 27, 1896, and have done no work indicating such intention; and the notice was not posted at the place intended by the defendant, Nunn, or in accordance with his intention, and the survey commenced under said notice was abandoned by the direction of defendant Nunn.

24th. The defendants have never had a present intention, or given any public printed or written notice of an intention to erect a dam to raise the water at Hanging rock eighty-five feet, and have never done or pursued with diligence any work to show or give notice of such an intention.

They intended to divert the water at Middle rock by a dam not more than fifteen feet high, and use the power thus generated, looking to the future success of the enterprise and the future demands for more power and a dam at Hanging rock; in the meantime performing such acts as would give them full control of the water and power of the canyon, awaiting the wants and contingencies of the future.

The defendants have never taken or had possession of the land in controversy, or any land in the canyon, except on which their flume is erected, and perhaps a constructive possession or claim of possession to so much of a dam fifteen feet high at Middle rock, would flow.

26th. The plaintiff, by the location and survey of its railroad, and the commencement of work, took and had possession and right of possession of the land in controversy, and all the posses-
907–14 sion and right of possession of its surveyed line that the nature of the property and the uses to which it was to be applied permitted.

27th. A dam that would raise the water eighty-five feet at Hanging rock, or any dam higher than one fifteen feet high at Middle rock, would be, under all the circumstances surrounding the case, unreasonable, unnecessary and not in accordance with the customs and conditions of the country; hampering and thwarting other interests and enterprises of a public character from passing through

this important gateway leading to the eastern portion of our country; and a higher dam in this locality is unnecessary in an adjustment of the relative rights and interests of the parties, and of the public interests in the use of said canyon.

Conclusions of Law.

As conclusions of law I find:

1st. That the plaintiff, prior to the commencement of this suit, had the possession, right of possession, and the inchoate title subject to a condition subsequent, which could be performed at any time within a year after the Government survey, in and to the lands described in the complaint.

2d. That the defendant, "The Telluride Power Transmission Company," has no corporate power in Utah to engage in generating electric power for sale.

3d. That the defendants have never had the title, possession or right of possession to said lands or any part thereof, or acquired any vested right in accordance with the laws or customs of the country, or any right to flow or otherwise occupy the said lands, or any part thereof, or to prevent the use and occupation thereof by the plaintiff for railroad purposes, and that the adverse claim of the defendants to the said lands or to the possession or occupation thereof is unfounded and invalid.

907–15

4th. That the plaintiff is entitled to judgment quieting and confirming its possession and right of possession of said lands as against the defendants and all persons claiming through or under them, and enjoining the defendants and each of them and all persons acting under them, from interfering with the plaintiff, or interrupting it in the use and occupation of said lands, and from hindering or obstructing the plaintiff in the construction and operation of railroad thereon and thereover. Also enjoining the defendants and each of them from erecting a dam in Provo river at any point or place which will flow a railroad to be constructed by the plaintiff on the grade of the survey now made therefor, on and over said lands, and for costs of suit. And judgment accordingly is ordered.

WARREN N. DUSENBERRY,
Judge of the Fourth Judicial District Court, Utah.

Indorsed: Filed at Provo City, Utah, April 17, 1897. George Havercamp, clerk. By A. V. Robinson.

907–16 (Title of Court and Cause.)

Judgment.

Findings of fact and conclusions of law having been made and filed, now, in accordance therewith and on motion of plaintiff's attorneys, it is adjudged and decreed:

That the plaintiff at and prior to the time of the commencement of this suit was and still is the owner, subject only to the paramount title of the United States, and was in and entitled to the possession

for a right of way and for railroad uses of the land described in the complaint, to wit:

A strip of land 200 feet wide and 100 feet wide on each side of center line of the survey thereof, being on and over unsurveyed lands of the United States, and on and over what it is estimated will be, when said lands are surveyed and subdivided, the northeast quarter of the northwest quarter of section thirty-four (34), and the north half of the northeast quarter of section thirty-four (34), and the southeast quarter of the southeast quarter of section twenty-seven (27) of township five (5), south of range three (3), east of the Salt Lake meridian; said strip of land being in or near the bottom of Provo canyon, in Utah county, State of Utah, on the south side of and following near to the course of Provo river, the entire line of said strip commencing at station 643 plus 40 of the survey of said line of railway of plaintiff as now located thereon, about 1,000 feet, more or less, up the river and northeasterly from a point in the canyon called "Hanging
907–17 rock," which point is about 715 feet, more or less, north, and 200 feet, more or less, west, from where it is estimated the common corners of sections 26, 27, 34 and 35 of said township, will be, when the township is subdivided, and thence running southwesterly down said river and canyon, on the southerly side of the river, and following the center line of the survey of plaintiff's railroad as located and staked, a distance of thirty-five hundred (3,500), feet, more or less, and to or near to station 608 of said center line, together with 100 feet in width on each side of said center line. The stations of the survey are each 100 feet in length, and the strip contains sixteen acres, more or less.

That the defendants have not, nor has either of them, at any time acquired or had any right, title, possession, or right of possession in or to said lands, or any part thereof, or any right to flow the same by a dam in said river or otherwise, and their adverse claim and the adverse claim of each of them to said lands and their claim of right to flow or submerge the same is invalid, and the title, possession and right of possession of the plaintiff in and to said lands, for a right of way for its railroad, as against the defendants and each of them, is hereby adjudged valid and confirmed and quieted.

And it is further ordered and adjudged that the defendants and each of them and the agents, servants and employees of the defendants and each of them, and all the persons acting under the defendants or either of them, do absolutely desist and re-
907–18 frain from interfering with the plaintiff's possession of said described land, and from obstructing or hindering the plaintiff, its agents and employees, in constructing and operating a railroad on the line and level now surveyed on said land, and from flowing or submerging said land by a dam or by any obstruction of the waters in Provo river, or in anywise hindering, delaying or obstructing the construction and operation of a railroad on the line and at the level the same is now located and surveyed on and over said land.

And it is further adjudged that the plaintiff have and recover its costs of suit, taxed at $212.35.

By the court.

WARREN N. DUSENBERRY, *Judge.*

Indorsed: Filed at Provo City, Utah, April 22, 1897. Geo. Havercamp, clerk, by A. V. Robinson, deputy.

58. The following are Plaintiff's Exhibits "9" and 10:" (Ab. p. 354).

908 Statutes of Colorado relating to corporation- as printed in the Revised Statutes of 1883 and reprinted in Mills' Annotated Statutes of 1891 as chapter 30, division 1, of organization government.

SEC. 473. At any time hereafter any three or more persons (except as hereinafter provided), who may desire to form a company for the purpose of carrying on any lawful business, may make, sign and acknowledge before some officer competent to take the acknowledgment of deeds, certificates in writing, in which shall be stated:

(1.) The corporate name of said company.

(2.) The objects for which the company shall be created.

(3.) The amount of capital stock of said company.

(4.) The term of its existence, not to exceed twenty years, except as hereinafter provided, save and except to make perpetual corporation insuring lives of individuals which have been heretofore or may be hereafter organized under the laws of Colorado.

(5.) The number of shares of which the said stock shall consist.

(6.) The number of directors or trustees of said company, and

(7.) The names of those who shall manage the affairs of such company for the first year of its existence.

(8.) And the name of the town or place, and the county in which the principal office of the company shall be kept.

(9.) And the name of the county or counties in which the principal business shall be carried on; and they shall make as many such certificates as may be necessary, so as to file one in the office of the recorder of deeds in each of such county or counties, and one in the office of the secretary of state; and when any company shall be created under the laws of this State for the purpose of carrying on part of its business beyond the limits thereof, such certificate shall state that fact and shall, also, state the name of the town and county in this State in which the principal office of said company shall be kept, and shall state the name of the county in which the principal business of such company is to be carried on within this State.

SEC. 477. That any incorporated company organized under the laws of this State, except railroad companies, may amend their articles of incorporation, in any respect, provided no incorporated company shall, by amendment, so change its articles as to work a change in the object, or purpose for which such company was originally organized.

SEC. 498. It shall and may be lawful for any corporation created or existing under the laws of this State for the purpose, among others, of exercising its franchises or carrying on part of its business beyond the limits of this State, and in another State or Terri-
969 tory of the United States or elsewhere, to accept any law of such other State or Territory of the United States, or foreign State and government, and to exercise within the territory of such other State or Territory or foreign State and government, all such authorities, powers, privileges, rights and franchises as may be by such laws conferred, subject to such duties, liabilities and restrictions as may by such laws be imposed.

SEC. 567. Whenever any three or more persons associate, under the provisions of this act, to form a company for the purpose of constructing a ditch for the purpose of conveying water to any mines, mills or lands, to be used for mining, milling or irrigating of lands they shall, in their certificate, in addition to the matters required in section two (2) of this act, specify as follows: The stream or streams from which the water is to be taken; the point or place on said stream at or near which the water is to be taken out; the line of said ditch, as near as may be, and the use to which the said water is intended to be applied.

SEC. 575. When any company shall organize, under the provisions of this act, to form a company for the purpose of constructing a flume, their certificate, in addition to the matters required in the second section of this act, shall specify as follows: The place of beginning, the terminus, and the route so near as may be, and the purpose for which such flume is intended, and when organized, according to the provisions of this act, said company shall have the right of way over the line proposed in such certificate for such flume; provided, it does not conflict with the rights of any former fluming, ditching, or other company.

SEC. 581. Any ore-reducing, mining or tunneling company, organized under the provisions of this act, shall have the power to acquire, by purchase or otherwise, mining property, and work, mine, tunnel and develop the same, erect necessary buildings, mills, machinery and appliances, and purchase materials for the proper working thereof, and do any and all things necessary and requisite to carry into effect the objects for which they may be formed, as named in their certificate of organization. The certificate of incorporation of any such company, in addition to the other matters required in this act to be stated therein, shall contain a statement that the stock of such company is either assessable or non-assessable, and each certificate of stock issued by any such company shall have plainly printed on the face thereof the word "assessable" or "non-assessable," as the case may be.

910 In the Supreme Court of the State of Utah, Regular October Term, October 23rd, 1900.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Respondent,
vs.
THE TELLURIDE POWER TRANSMISSION COMPANY and L. L. Nunn, Appellants.
} Submission.

This cause coming on regularly for hearing was argued by Hon. H. P. Henderson in behalf of the appellants; by Hon. R. Harkness in reply, was submitted, and by the court taken under advisement.

Regular October Term, December 11, 1900.

Title of Court and Cause.

Judgment.

This cause having been heretofore argued and submitted, and the court being sufficiently advised thereon, it is now here considered, ordered, and adjudged, that the judgment of the lower court be, and the same is hereby, affirmed, with costs.

911 In the Supreme Court of the State of Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Respondent,
vs.
THE TELLURIDE POWER TRANSMISSION COMPANY and L. L. NUNN, Appellants.

This is an action, under the laws of Utah, to condemn a strip of ground for a right of way 200 feet wide by about 4,500 feet long, in Provo canyon, Utah county, along and near the Provo river. The complaint was filed September 12, 1896, and among other averments alleges plaintiff's corporate capacity, and its authority to construct a line of railway through Provo canyon; that in 1889 it filed with the Secretary of the Interior at Washington a copy of its articles and proofs of organization; that on or about March 1, 1896, it commenced a survey and location of its line of road over the land claimed by the defendants, from Provo through the canyon, and completed it for a distance of 40 miles from Provo, and on both sides of the canyon for 20 miles upon unsurveyed land of the United States; that a map of such survey has been made and adopted by it as its definite location, and that it has commenced and prosecuted the construction of its road on such line; that prior to plaintiff's survey, defendant Ferguson,
912 (who does not appeal) had or claimed some possessory right by occupation of some part of such land not surveyed over which plaintiff's line of road runs; that plaintiff claimed for its right of way for railroad purposes a strip of land 100 feet wide on each side of the center line of its survey up the river across land that defendant

Ferguson claims; that the land is necessary for the construction and operation of its road; that plaintiff is the owner and in the possession thereof, and that it could not purchase said right of way from either of the defendants.

Defendants, The Telluride Power and Transmission Company and L. L. Nunn answered, jointly, and denied many of the allegations of the complaint, claimed the land and possession thereof, and a right to flow the same for power purposes. Among other matters the answer denies the jurisdiction of the district court; claims the title and possession of the premises and flow of the water as part of a reservoir site and for agricultural purposes, and as having been claimed by defendants and Nunn prior to the railroad survey; that the property was claimed for a public use, and therefore could not be condemned by the proceedings instituted by the plaintiff, and also claims that the plaintiff did not intend to construct a railroad.

Defendant Ferguson answered separately, alleging the main facts in the former answer, and alleged a contract to convey to defendant Nunn.

Ferguson, who was a squatter upon the land, died in February 1897. His widow and heirs answered after his death, and claimed to occupy the land sought to be condemned, but subject to the paramount title of the United States.

913 The testimony is very voluminous and somewhat contradictory, but tends to show, among other things, the organization of the plaintiff in 1889, with authority to build and construct a line of railroad over either of the two lines surveyed in the canyon in question; that soon after its organization the plaintiff filed with the Secretary of the Interior a copy of its articles of incorporation and due proof of its organization under the same; that on March 24, 1896, it commenced a survey and location of its railroad up said canyon, over the land in question, which is unsurveyed land of the United States; that plaintiff has made a map of said survey and located its line, and the survey and location thereof has been adopted by it as the definite location thereof, and that it has since prosecuted the construction of said road with all convenient speed to the completion thereof; that at different intervals of time after August 1894, and prior to March 24th 1896, defendant Nunn had been upon the land, in the interest of the defendant company, with Mr. Holbrook, and some levels were made along the canyon; that survey stakes were placed in different localities, and plans for a dam were discussed and some underbrush was cut along the river; that Mr. Holbrook, as trustee, under the direction of Nunn, posted a notice dated Oct. 5, 1894, about 200 feet above the county bridge near Bridal Veil falls, and about 2,800 feet below Middle rock, and 4,200 feet below Hanging rock, claiming the right to take water, 80 yards above the county bridge, near where the notice was posted, and near Thayer's house, for the purpose of generating an electrical current, etc., but in May 1895, this project to take such water near this point was abandoned, and in May, 1895, Middle rock was selected by the engineer of the defendant company, as a point of diversion, by a temporary plat, and in 1895 surveyors acting for the defendants ran a

trial line from Middle rock 3,700 feet above Holbrook notice.
914 This power line was 60 feet above the level of the river at Middle rock and run up the river about one mile above Hanging rock, and down the river about the same distance. A stake marked "top of the dam" was set near the lower level and the river 15 feet above the water line. This stake remained there until August 1896. About March 26, 1896, preliminary surveys were made for a flume on the lower level. On March 24th, notices were posted by defendants' chief engineer, and Nunn's name was attached thereto. One of these notices was posted at Middle rock on the 60-foot level, and a like notice was posted at Deer creek, 7 miles above Middle rock. The notices claimed all land lying up the stream below the level of the point of the notices, for reservoir purposes, and a dam at the point opposite the notices so constructed as to contain the water of the stream on the level with the notices, and for the purpose of using the water for agricultural and manufacturing purposes. Thereafter Nunn declared the notices a mistake, and that he did not intend a 60-feet dam at that place, but intended to raise the water 85 feet at Hanging rock, and directed a survey at Hanging rock on the 85-foot level. No notice was given for an 85-foot dam at Hanging rock, but surveys were made. Some work was done in April 1896, and in the summer of 1896 near this point. No dam was constructed at Hanging rock, and no notice to erect it had been given. A dam 15 feet high would not injure the plaintiff's line or the county road. An 85-foot dam at Hanging rock would flow the canyon over four miles above that point, and would flow the county road and railroad from one to seventy feet, and would require a change of the railroad grade for about nine miles at a cost estimated at $20,000 per mile, besides many other expenditures.

In December, 1896, Ferguson, who was a squatter upon the
915 land sought to be condemned for a railroad right of way, conveyed his interest therein to the defendant Nunn.

The question of the damages to the property was submitted to the jury, and damages were awarded to the defendants.

The question concerning conditions precedent to the condemnation, and whether the plaintiff had shown a right thereto, and all conflicting and adverse claims to the property were reserved by the court.

After stating the facts, MINER, J., delivered the opinion of the court.

1. The Telluride Power and Transmission Company and L. L. Nunn, the appellants, filed a petition to remove the case to the Federal court, alleging diversity of citizenship. This petition was denied by the district court, and after transfer to the Federal court by filing a transcript of the proceedings, the case was remanded to the district court. The appellants now object to the jurisdiction of the State courts to hear or try the case, and ask this court to review the order of the United States court in remanding the case to the district court of the State. This we cannot do. From such an order no appeal lies

to this court. The order reman-ing the case is final, and this court has no authority to review, on appeal, the order of the Federal court remanding the case to the State court.

Murray *v.* Lockhart, 123 U. S. 56.
Richmond & Danville R. R. Co. *v.* Thoubron, 134 U. S. 45.
In re Pennsylvania Co., 137 U. S. 451.
Telluride Power Co. *v.* R. G. W. R'y Co. 175 U. S. 639.

2. Many of the questions involved in this case were passed upon by this court in the case of The Rio Grande Wes. R'y Co. *v.* Telluride Power Company, *et al.*, 16 Utah 125. In that case the court held, in substance, that respondent was such a railroad corporation as was contemplated by sec. 2358 C. L. U. 1888; that its articles were such as were contemplated by it, and
916 that it was entitled to ten years from the time it duly filed them within which to finish the road and put it in full operation; that it sufficiently appeared from the record that the plaintiff had located its right of way upon the land in dispute under sec. 1, of an act granting railroads the right of way through the public lands of the United States, found in 18th Stat. at Large, p. 482, part 3; that the plaintiff has duly filed its articles of incorporation, and due proof of its organization thereunder, with the Secretary of the Interior, and that it surveyed and located its right of way over the land in dispute (being along the same line in question here) about the 1st day of July, 1896; that the plaintiff's location of its right of way over the land, and its possession thereof was lawful; that under subdv. 4 of the same act (18 Stat. at Large 483) the land in question being unsurveyed land of the United States, the plaintiff had twelve months after the land was surveyed by the Government within which to file with the register of the proper land office a profile of its road; that under the laws of this State, and sec. 2339 R. S., U. S., the defendants never had the title, possession, or right of possession to the land in question, or acquired any vested right in accordance with the laws or customs of the country, or any right to flow or otherwise occupy said land or prevent the use and occupation thereof by the plaintiff railroad company, and that their adverse claim to the land in question as against the plaintiff was unfounded, and that plaintiff was entitled to judgment; that the defendants (if properly organized) might have obtained a valid right to any unappropriated water of Provo river for the purpose of operating machinery, for irrigation, or other useful purpose, under the laws of this State and under sec. 2339 R. S., U. S. This section reads, as
917 follows, in part: "Wherever by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes have accrued, and the same are recognized and acknowledged by the local customs, laws and decisions of courts, the possessors and owners of such vested right shall be maintained and protected in the same, and the right of way for the construction of ditches and canals for the purpose herein specified is acknowledged and confirmed;" that such right was not unrestricted however; that it must be exercised within a reasonable time; that

while dams and reservoirs may be erected, they must be kept within reasonable limits; that defendants' dam to a height of 15 feet would not interfere with the use of the highway in the canyon, or with the use for other legitimate purposes; that the defendants had not appropriated the land in dispute, and that neither of the defendants was in actual possession of the land when the plaintiff located his right of way, took possession, and engaged in grading it.

3. On the trial of this case the judgment-roll of the former case referred to, was placed in evidence, under objection. The complaint was a common complaint to quiet title to an easement under the act of Congress, and the possession of a strip of land adjoining Ferguson's strip on the northeast, extending along the canyon to Hanging rock and Middle rock to appellants' alleged diverting dam. The defendants were the same, except Ferguson and the answer is about the same. Holbrook disclaimed as here. The identity of the land was admitted. The issue in the case was left between the appellants and the plaintiff as here on this appeal, and practically on the same questions. Appellants objected to the introduction of the judgment-roll in evidence, because it was not pleaded. The evidence was admitted, but no assignment of error was made upon its re-
918 ception. The question is, what effect does the evidence have?

In the present case the plaintiff does not base its cause of action upon the judgment. No counter-claim was put in by the defendants, and there was no opportunity to plead it to the answer. Besides the judgment was not rendered or decision reached in the supreme court until the issues were made in this case. The judgment in such cases should be pleaded if the plaintiff bases any right upon it, and there is an opportunity to plead it. As a plea the judgment is a bar, as evidence it is conclusive on the point decided between the same parties.

In Herman on Estoppel, sec. 107, it is said: "But when the same matter is directly in question in another suit and the judgment of the former suit is directly in point, it will be as a plea, a bar, as evidence, conclusive."

In sec. 784 Black on Judgments, it is said: "A former recovery in which the same matter was tried and determined upon the merits, may be given in evidence without being specially pleaded, whenever the party, plaintiff or defendant, had no opportunity to plead the judgment specially, and its effect, in such case, is equally conclusive as if it had been pleaded."

While it is a general rule that estoppel by a former judgment must be plead, the rule does not apply to cases where no opportunity to plead the estoppel is given, and when the judgment is admitted as evidence, where there is no opportunity to plead it, both the preponderance of authority in this country and the weight of sound legal reason sustain the doctrine that a former judgment, if admissible under the general issue, is just as conclusive when so presented, as if it had been pleaded.

2 Black on Judgments, secs. 784, 787, and cases cited.

919 So, a successful defense to one of a series of actions founded upon the same transaction or subject-matter, if it goes to the merits of the whole, is a complete estoppel to any subsequent action between the same parties. This rule is based upon the principal that a judgment is final as to all points and questions actually litigated and determined by it. The estoppel operates only in regard to matters in issue between the same parties and upon the determination of which the judgment was rendered, and if the second action is upon a different claim or demand, the judgment in the prior suit operates as an estoppel only as to those matters in issue or controverted, upon the determination of which the final judgment was rendered.

Black on Judgments, secs. 750, 751, 755.
Oregon R. R. Co. *v.* O. R. & N. Co. 27 Fed. 277.
Roberts *v.* U. P. R. R. Co. 158 U. S. 1.

The principles announced in the former decision, so far as pertinent in the present case, must be considered as determining the questions adversely to the appellants, if the parties were the same. But the parties are not the same. Ferguson was not a party in the former suit. The former decision must be treated as authority, and as determining the law in this case, in so far as it decides the same questions involved in the present case.

4. The record shows that the San Miguel Gold Mining Company was organized in Colorado February 7, 1891, with a capital of $15,000,000, and was authorized to acquire by purchase, lease, or otherwise, mining property, together with water rights, power, ways, mills and mill sites; to develop, mine, work and utilize the same, and to carry on a general mining business. Its principal office is in Telluride, Colorado, and its principal business is to be done

920 in Colorado, and its articles provide that part of its business may be done in Boston, Mass., and its principal office kept there. The stock is non-assessible, and no requirements for payments of subscription are incorporated in it. In February, 1896, an amendment of its articles was made and filed with the secretary of state in Colorado changing the name of the company to the Telluride Power Transmission Company. Appellant Nunn was its manager.

Sec. 427, p. 614, 1 Col. Stat. 1893, among other matters provides that "when said corporation shall be created under the laws of this State for the purpose of carrying on part of its business beyond the limits thereof, such certificate shall state the fact." Subdv. 2 of this section provides that the object for which the company is created shall be stated. Sec. 498, authorizes Colorado corporations authorized to do business out of the State, to accept the laws of the other States and there exercise its franchise.

So it appears that the appellant company is a mining corporation organized in Colorado, without complying with the statute and with no other powers to do business as such in this State. Without complying with the constitution and laws of this State with respect to foreign corporations, it unlawfully assumes to appropriate both land

and water within this State. This must be so, because under sec. 2, art. 12 of the constitution of this State, no corporation in existence in this State when the constitution is adopted shall have the benefit of its laws, without filing with the secretary of state an acceptance of the provisions of the constitution; and under sec. 6, no corporation organized out of the State shall be allowed to transact business in this State on conditions more favorable than those prescribed by law for similar corporations organized under the laws of the State.

Under sec. 9, no corporation is allowed to do business in this
921 State without having one or more places of business therein, with an agent upon whom process may be served, nor without first filing a certified copy of its articles of incorporation with the secretary of state. Sec. 10 provides that no corporation shall engage in any business other than that expressly authorized in its charter or articles of incorporation.

Sec. 2293 C. L. U. 1888, as amended in 1898, and secs. 351 and 352 R. S. 1898, expressly embody these provisions of the Constitution, and prohibit foreign corporations from doing business in this State, unless they have complied with these requirements of the law; and any corporation failing to so comply with the provisions of the law *are* not entitled to the benefits of the law of this State relating to corporations.

The appellant corporation did not comply with the laws of this State, and has no power to engage in its business of mining, or to acquire any water rights under the laws of this State. A corporation of Colorado coming into this State cannot bring with it pow*e*rs with which it is not endowed in Colorado. It can only have an existence under the express laws of the State where it is created, and can exercise no power which is not granted by its charter or some legislative act. The appellant corporation never filed with the secretary of state of the State of Utah, a copy of its articles of incorporation, by either name under which it was incorporated, and never accepted the laws or constitution of Utah, nor has it appointed any agent or fixed any place of business within the State as required by law. The defendant corporation, therefore is not entitled to the benefit of the laws of this State, with reference to corporations.

State *v.* So. Pac. Co. 28 So. Rep. 372.
Oregon R'y Co. — Oregonian R'y Co. 130 U. S. 1.
Barse Live Stock Co. *v.* Range Valley Cattle Co. 50 Pac. 630 (Utah).

922 Under sec. 2339 R. S., even if priority of possession of the property in question was shown in the defendant corporation, still its right to locate and use the water or land is not recognized or acknowledged by the laws of this State, and it was not in a position to question the right of the plaintiff in the premises.

5. Appellant Nunn was a resident of Colorado, the general manager and in charge of the business of the defendant corporation, both in Colorado and Utah. The chief engineer, hydraulic engineer and officers of the defendant corporation, inclusing the presi-

dent and attorneys, consulted with and acted with him with respect to the acts performed with reference to the appropriation of water and in making the improvements at Hanging rock, discussed by them but no plan for a dam at Hanging rock was ever actually made, and no dam was constructed there. Throughout the whole procedure the board of the defendant corporation was the controlling authority for, and with whom Nunn acted. If Nunn had any right, it was with reference to the smaller power located below. The dam at Hanging rock was to be a larger power, and was talked about in the project but it was not constructed, and the ownership, if in any one, was in the defendant company, which was incapable of acquiring such ownership.

While the testimony is very uncertain, it sufficiently appears that whatever was done by Nunn in the appropriation of water, was done for the use and benefit of the defendant company, and he cannot be treated as a personal claimant and owner of the easement and right of way in controversy as against the right of way acquired by respondent.

6. It appears that Mr. Ferguson had settled upon 160 acres of unsurveyed Government land situated in the canyon in question above Hanging rock, and resided there in 1895. In August
923 1896, defendant Nunn entered into a contract to purchase said land after Ferguson should thereafter acquire a homestead title. In December 1896, pending this action, Ferguson conveyed to Nunn whatever title he had in the land, and Ferguson occupied the land until his death in February 1897, and his family afterwards succeeded to its occupation, and were made or became parties to the action to condemn. So far as appears defendant Nunn was never in occupation of the land, or any land above Hanging rock. Under this conveyance, Nunn, not being a *bona fide* settler, nor in possession of the land, would take no right, except, possibly, the improvements, as against the right of way of the respondent.

Ferguson's deed to Nunn divested Ferguson of whatever possessory right he had in the land. If the Ferguson heirs thereafter entered thereon in their own right, their possession only dated from the death of their father, in February 1897, long after the respondent's right of way was acquired. The Ferguson heirs could not occupy the Government land in their own right and for Ferguson or Nunn, nor could Nunn homestead this land by proxy. A homestead or squatter's right is a personal right, and the possession under it must be personal. Not having obtained any right by contract or deed until 1896, after the commencement of this suit, and after the grant to the respondent had vested subject to the payment of damages to the rightful party in possession, if any, and not having possession, or the right of a *bona fide* settler under the act of Congress, Nunn, under his deed, at most, simply had the right to enter upon the land and take the improvements. Having no title or possession Nunn was not entitled to damages.

As held in Conlan *v.* Quimby 104 U. S. 420, a party settling upon unsurveyed Government land who in good faith complies with
924 the statutory requirements, is entitled as against subsequent settlers to pre-empt the land, but would derive no right thereto

by purchasing the claim of a prior settler, unless by actual entry at the proper office he had acquired some right thereto.

In the present case Nunn had made no entry at the proper office, and had no possession of the land or right of possession against the respondent.

Frisbie *v.* Whitney, 9 Wall. 187.
Yosemite Valley case, 15 Wall. 77.
Buxton *v.* Traver, 130 U. S. 232.
Moore *v.* Besse, 43 Cal. 511.
Sproat *v.* Durland, 35 Pac. Rep. 682.

Whether any damages accrued to the Ferguson heirs at the time the summons was served in September, 1896, under sec. 3599 C. L. U. 1888, and Roberts *v.* U. P. R'y Co. 158 U. S. 1, we are not called upon to decide. The damages have been assessed by the jury and paid, and no appeal has been taken therefrom by them.

The appellants assign many errors upon the refusal of the court to instruct the jury as requested, upon the instructions given to the jury, and upon the facts found by the court. Under the view taken these questions become unimportant as neither of the appellants were injured in their rights; nor were either entitled to any damages under the facts shown in this case. The instructions were, at least, as favorable to the appellants as they had a right to expect.

Upon the whole record we find no reversible error. The judgment of the district court is affirmed, with costs.

We concur.

BARTCH, *C. J.*
BASKIN, *J.*

925 In the Supreme Court of the State of Utah.

Filed Jan. 7, 1901. Lilburn P. Palmer, Clerk Supreme Court, Utah.

RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, Impleaded with W. W. Ferguson and L. Holbrook, Defendants.

Now come the said defendants, The Telluride Power Transmission Company and L. L. Nunn and say that in the final judgment rendered by the supreme court of the State of Utah on the 11th day of December 1900 and in proceedings had prior thereto certain errors were committed to the prejudice of the defendants, which will more in detail appear in the assignments of errors to be filed as part of this petition.

And the petitioners further say that in the final judgment and decision of the supreme court of the State of Utah the said court erred in holding and deciding and determining that these defendants, both citizens of the State of Colorado, one a corporation existing under the laws of the said State of Colorado and the other a natural person, did not have the authority or the right to locate and appropriate public lands of the United States upon the Provo river

flowing through said public lands of the United States for the purpose of maintaining a dam with which to generate power to create electricity, and such decision was contrary to the protection afforded these defendants by the fourteenth amendment of the Constitution of the United States. The decision likewise violated the rights of the said defendants under section 2 article 4 of the Constitution of the United States:

"The citizens of each State shall be entitled to all privileges and immunities of citizens in the several States."

And the petitioners further say that in the final judgment and decree of the said supreme court of the State of Utah and of the district court of the fourth judicial district in and for the county of Utah, State of Utah, a decision was had against a right and privilege of these defendants claimed under a statute of the United States,

which right and privilege was specially set up and claimed
926 by these said defendants in said cause. That by the answer in said cause the defendants allege that they had the right and authority from the United States and were exercising it to erect a dam in Provo canyon for the purpose of creating power to transmit electricity. That said right and authority existed under the mining laws of the United States originally enacted in 1868 and amended in 1872, Revised Statutes section 2339, and the said right was denied by the said plaintiff and the said district court of the fourth judicial district and the said supreme court of Utah on appeal held that these defendants had no right to erect such dam on the public unsurveyed lands of the United States

And the petitioners further say that the said fourth judicial district court in and for the county of Utah, State of Utah, and the said supreme court of the State of Utah in affirming the said decision on appeal have decided against the right of these defendants existing under the statute of the United States to remove the said cause from the said State court above named to the United States court, which claim was exercised duly by the petition and bond filed in due time by these defendants in the fourth judicial district court before the time expired for these said defendants to appear and answer to the suit brought against them by the said plaintiff in this cause.

Wherefore these defendants pray that a writ of error may issue in their behalf to the supreme court of the State of Utah for the correction of the errors so complained of, and that the transcript, papers and records in this cause, duly authenticated, may be sent to the Supreme Court of the United States.

ARTHUR BROWN,
HENRY P. HENDERSON,
Attorneys for L. L. Nunn and The Telluride Power Transmission Co.

927 In the Supreme Court of the United States.

Filed Jan. 7, 1901. Lilburn P. Palmer, Clerk Supreme Court, Utah.

TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, Impleaded with W. W. Ferguson and L. Holbrook, Plaintiffs in Error,

vs.

RIO GRANDE WESTERN RAILWAY COMPANY, Defendant in Error.

Now come the said plaintiff- in error by Arthur Brown and Henry P. Henderson their attorneys and say that in the proceedings and records in the above-entitled action there was manifest error in this, to wit:

1. The court erred in denying defendants' petition to remove said cause to the Federal court.

2. The court erred in assuming to retain jurisdiction over said cause and proceeding to try the same after the filing of the petition on the part of the defendants to remove said cause to the circuit court of the United States for the district of Utah.

3. The court erred in holding and deciding that it had jurisdiction to hear, try and determine said cause.

4. The supreme court of the State of Utah erred in sustaining the decision of the district court in refusing to remove said cause and in holding that it, the supreme court, had no jurisdiction to review that decision.

5. The district court erred in refusing to charge the jury as requested in request No. 8 as follows, to wit:

"The use to which it is alleged the defendants propose to put said land, namely, 'to flow the same for power purposes,' is lawful, public use under the statutes."

And the supreme court erred in sustaining the district court in that ruling.

6. The district court erred in refusing to charge the jury as requested in request No. 10 as follows, to wit:

"So far as this case is concerned, the right to appropriate water begins when actual work begins, which is intended and calculated to effect an application of the water to some beneficial use, and the right continues as long as the work is prosecuted with diligence.
928 While the work is being so prosecuted the extent of the right is the same as the extent of the claim made by the appropriator within reasonable limits. The appropriation should be completed within a reasonable time; and when it is so completed the right relates back to the beginning of the work, and is limited by the extent of the appropriation. What are diligence, a reasonable time and reasonable limits, are questions of facts for the jury under all of the circumstances of the case." And the supreme court erred in sustaining the district court in that ruling.

7. The district court erred in refusing to charge the jury as requested in request No. 11 as follows, to wit:

"If defendant Nunn at any time prior to March 24th 1896, deter-

mined to appropriate the waters of Provo river for power purposes, and to build a dam for the purpose of obtaining such power, and commenced work in Provo canyon, and such work plainly indicated such purpose on his part, and was calculated to carry out such purpose, and he was at all times up to the commencement of this suit prosecuting said work with diligence, and if such dam and the power to be generated thereby were reasonable in their extent and purpose, and the erection of such dam would flow the land described and the plaintiff had knowledge of this fact on March 24th 1896, and said plaintiff had not before that date commenced to survey its proposed line of road running over said land, then your verdict should be for the defendant."

And the supreme court erred in sustaining the district court in that ruling.

8. The district court erred in refusing to charge the jury as requested in request No. 12 as follows, to wit:

"If defendant, Nunn, had before March 24th, 1896, formed the purpose in good faith to build a dam in Provo river at or near Hanging rock to a height of 25 feet, thereby raising the water to that extent and overflowing the land described, and had after such determination commenced actual operation on the ground, fairly and reasonably indicating such purpose, and continued the same with diligence to the commencement of this suit, and the plaintiff before it commenced its work knew of such purpose then and in that case your verdict must be for the defendant."

And the supreme court erred in sustaining the district court in that ruling.

9. The district court erred in refusing to charge the jury as requested in request No. 13 as follows, to wit:

929 "If, under the rule before stated, defendant Nunn acquired the right to flood the strip of land described for power purposes, and said right was prior in point of time to the right of plaintiff, and if the plaintiff could build its line of road on a grade carrying it above the obstruction in the river and the land overflowed thereby, then and in that case plaintiff is not entitled to condemn the land in controversy."

And the supreme court erred in sustaining the district court in that ruling.

10. The court below erred in charging the jury:

"As a guide on the question of compensation and damages you are instructed that it is admitted that the tract of land of which the strip in question is a part, was and is unsurveyed public lands of the United States. That the occupant of such land acquires no title or estate in the land by such occupation or possession."

And the supreme court erred in sustaining the court below in that charge and in refusing to reverse the case by reason thereof.

11. The court below erred in charging the jury as requested by the plaintiff in request No. 6:

"In assessing values and damages, you are to consider the condition of the land and improvements pertaining to the realty, as they existed on the said 14th of September, '96, and with refer-

ence to their fair market value for the uses to which they could be put as lands in their condition, and you are instructed that neither of the defendants, L. L. Nunn or The Telluride Power Transmission Company has shown a right to flow the same, or to their use as a reservoir site, or to any increase of value or damages by reason of any right to flow or use the same as a reservoir site; but you are further instructed that under the issues submitted to you for your determination in this case, you cannot in estimating the market value of the premises, or the damages to the possessory right of the defendants thereto, consider such value with reference to any right of the defendants or either of them, to flow the same with water to any depth whatever."

And the supreme court erred in sustaining the court below in that charge and in refusing to reverse the case by reason thereof.

12. The supreme court erred in holding that the defendant corporation The Telluride Power Transmission Company had no right to acquire title or right of possession to the land involved for the purpose of a reservoir because it was a corporation of the State of Colorado.

930 13. The supreme court erred in holding that the appellant corporation had no right to acquire lands because it did not comply with the laws of the State of Utah and had no power to *to* acquire water rights under the laws of the United States.

14. The supreme court erred in holding that the appellant corporation "unlawfully assumed to appropriate land and water within the State of Utah."

15. The supreme court erred in holding that any law or the constitution of the State of Utah would be valid which excluded or attempted to exclude the appellant corporation created under the laws of Colorado from acquiring lands of the United States and water rights situated in Utah or from acquiring title to the lands of the United States situated within the limits of Utah.

16. The supreme court erred in holding that the appellant Nunn, a resident of Colorado had no authority to acquire in his own name by location under the laws of the United States water rights which were subsequently to be used for the purpose of the appellant corporation.

17. The supreme court erred in holding that because the appellant corporation organized under the laws of the State of Colorado did not appoint an agent in Utah and file a statement accepting the constitution and laws of Utah that therefore it, the appellant corporation had no authority to locate unsurveyed lands of the United States in the State of Utah for the purposes of a reservoir and to acquire title to said land and to water right under the laws of the United States.

Whereupon said plaintiffs in error pray that said judgment may be reversed.

ARTHUR BROWN,
HENRY P. HENDERSON,
Att'ys for Plaintiffs in Error.

931 In the Supreme Court of the State of Utah.

Filed Jan. 7, 1901. Lilburn P. Palmer, Clerk Supreme Court, Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, Impleaded with L. Holbrook and W. W. Ferguson, Defendants.

On the 7th day of January, A. D. 1901, came the said defendants, by their attorneys Arthur Brown and Henry P. Henderson, and filed and presented herein a petition praying for the allowance of a writ of error intended to be urged by *him:* praying also that a transcript of the records and proceedings and papers upon which the judgment herein was rendered and duly authenticated may be sent to the Supreme Court of the United States, and that such full and further proceeding may be had as may be proper in the premises.

In consideration thereof I, James A. Miner, chief justice of the supreme court of the State of Utah, do hereby allow the writ of error upon the defendants giving bond according to law in the sum of one thousand dollars, which shall operate as a supersedeas bond.

JAMES A. MINER,
Chief Justice.

932 In the Supreme Court of the United States, U. S. A.

Filed Jan. 7, 1901. Lilburn P. Palmer, Clerk Supreme Court, Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, Impleaded with W. W. Ferguson and L. Holbrook, Defendants.

To The Rio Grande Western Railway Company, plaintiff:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States, to be holden in Washington, in the District of Columbia, within 60 days from the date of this citation, pursuant to the writ of error filed in the clerk's office of the supreme court of the State of Utah, at Salt Lake City, Utah, wherein L. L. Nunn and The Telluride Power Transmission Company are plaintiffs in error and you, The Rio Grande Western Railway Company, are defendant, to show cause, if any there be, why the judgment rendered against the said plaintiffs in error as in the said writ of error mentioned, should not be corrected and why speedy justice should not be done to the parties in that behalf.

Witnesseth the Honorable Melville W. Fuller, Chief Justice of the United States, this 7th day of January nineteen hundred and one.

JAMES A. MINER,
Chief Justice of the State of Utah.

Due service of a copy of within citation, or order allowing said writ, and of the writ of error admitted this

THURMAN & WEDGWOOD &
BENNETT, HARKNESS, HOWAT,
SUTHERLAND & VAN COTT,
Attorneys for Defendant in Error The Rio Grande Western Railway Company.

933 THE UNITED STATES OF AMERICA, ss:

The President of the United States of America to the honorable the judges of the supreme court of the State of Utah, Greeting:

Because in the record and proceedings, as also in the rendition of the judgment of a suit which is in the said supreme court of the State of Utah, before you, being the highest court of law or equity in said State in which a decision could be had in said State between The Rio Grande Western Railway Company, plaintiff and The Telluride Power Transmission Company, L. L. Nunn impleaded with W. W. Ferguson and L. Holbrook defendants, wherein was drawn in question the validity of an authority exercised under the United States, to wit; the authority and right of the said L. L. Nunn and The Telluride Power Transmission Company, both citizens of the State of Colorado to build a dam upon the public domain of the United States within the canyon situate on the public domain, to wit Provo canyon within the State of Utah; said dam to be built for the purpose of utilizing the power therein of Provo river for the purpose of transmitting electricity; and the decision was against the validity of said right and authority; and wherein also a decision was had against the right and privilege of these defendants claimed under a statute of the United States to remove the said cause from the State court to the United States court in and for the district of Utah; and in the said decision and rulings of the said supreme court manifest error has happened to the great damage of the said Telluride Power Transmission Company and L. L. Nunn as by their complaint appears, we, being willing that error, if any hath been done, should be duly corrected and full and speedy justice done to the parties aforesaid in this behalf, do command you that if judgment therein be given, that then and under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same to the Supreme Court of the United States, together with this writ, so that you may have the same at Washington within sixty days of the date hereof, and that, the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein to correct that error what of right and according to the laws and customs of the United States should be done.

934 Witness the Hon. Melville W. Fuller, Chief Justice of the said Supreme Court the 7th day of January 1901.

[Seal United States Circuit Court, District of Utah.]

JERROLD R. LETCHER,
Clerk United States Circuit Court, District of Utah.

Allowed by—

JAMES A. MINER,
Chief Justice of the State of Utah.

935 In the Supreme Court of the State of Utah.

Filed Jan. 7, 1901. Lilburn P. Palmer, Clerk Supreme Court, Utah.

THE RIO GRANDE WESTERN RAILWAY COMPANY, Plaintiff,
vs.
THE TELLURIDE POWER TRANSMISSION COMPANY, L. L. NUNN, Impleaded with W. W. Ferguson and L. Holbrook, Defendants.

Know all men by these presents that we, The Telluride Power Transmission Company and L. L. Nunn as principals and A. Hanauer and J. Barnett, as sureties are held and firmly bound unto the *defendants*, The Rio Grande Western Railway Company, in the full and just sum of one thousand dollars, to be paid to the said plaintiff, The Rio Grande Western Railway Company, its certain attorneys or assigns; to which payment, well and truly to be made we bind ourselves, our heirs, executors, and administrators, jointly and severally by these presents.

Sealed with our seals and dated this seventh day of January in the year of our Lord, one thousand nine hundred and one.

Whereas lately, in the supreme court of the State of Utah, in a suit depending in said court between the said defendants, The Telluride Power Transmission Company and L. L. Nunn and The Rio Grande Western Railway Company, plaintiff, a judgment was rendered against the said defendants The Telluride Power Transmission Company and L. L. Nunn, and the said Telluride Power Transmission Company and L. L. Nunn having obtained a writ of error and filed a copy thereof in the clerk's office of the said court to reverse the judgment of the aforesaid suit, and a citation directed to the said Rio Grande Western Railway Company, citing and admonishing them to be and appear in the Supreme Court of the United States, to be holden in Washington, in the District of Columbia, within sixty days from the date of said citation:

Now, the condition of the above obligation is such that if the said Telluride Power Transmission Company and L. L. Nunn shall prosecute said writ of error to effect and answer all damages —
936 costs *and* if they fail to make the said plea good, then the

above obligation is to be void; else to remain in full force and virtue.

THE TELLURIDE POWER TRANSMISSION CO.,
Per ARTHUR BROWN, *Att'y.* [SEAL.]
L. L. NUNN, [SEAL.]
Per ARTHUR BROWN, *Att'y.*
A. HANAUER. [SEAL.]
J. BARNETT. [SEAL.]

Sealed and delivered in the presence of—
E. C. LACKNER.

Approved by—
JAMES A. MINER,
Chief Justice Supreme Court of the State of Utah.

STATE OF UTAH, } ss:
County of Salt Lake, }

A. Hanauer and J. Barnett, both of Salt Lake City Utah, the sureties on the foregoing bond on appeal, being duly sworn, each for himself and not one for the other deposes and says that he is a resident and freeholder in the State of Utah and is worth the amount named in the foregoing bond over an- above all his just debts and liabilities, exclusive of property exempt from execution.

[SEAL.] A. HANAUER.
J. BARNETT.

Subscribed and sworn to before me this seventh day of January, 1901.

FRANK C. LEA,
Notary Public.

My commission expires March 10, 1903.

937 UNITED STATES OF AMERICA.

STATE OF UTAH, } ss:
County of Salt Lake, }

I, Lilburn P. Palmer, clerk of the supreme court of the State of Utah, in pursuance of the attached writ of error, to return annexed hereto, a transcript of the record and proceedings in said cause, together with the original citation, petition for writ of error, order granting writ, writ of error, assignments of error, and copy of the bond in said cause; I further certify that the several copies contained herein are full, true and correct copies of the originals on file or of record in my office.

Seal Supreme Court, State of Utah, Jan. 4, 1896.

In witness whereof I hereunto set my hand and affix the seal of said supreme court this the 22nd day of March, 1901.

LILBURN P. PALMER,
Clerk Supreme Court, Utah.

Endorsed on cover: File No. 18,097. Utah supreme court. Term No. 284. The Telluride Power Transmission Company *et al.*, plaintiffs in error, *vs.* The Rio Grande Western Railway Company. Filed April 1st, 1901.